

22.04.2024

Hy APEX connect_ sustainability-apex.org

APEX apps addressing climate change

Niels de Bruijn, Business Unit Manager

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code of change

 **Hyand** by
GOD | MT

Say Hy_!

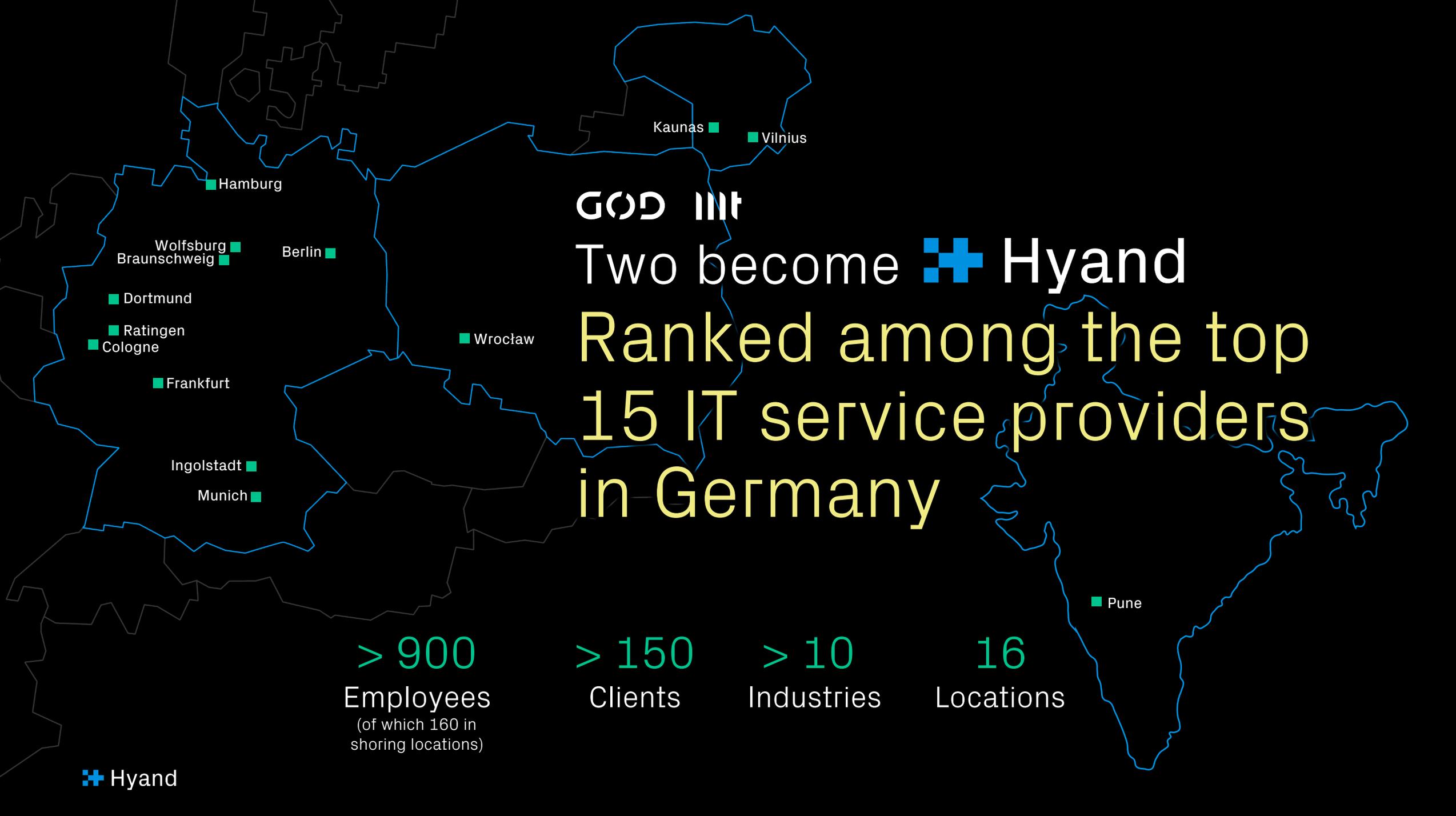


Niels de Bruijn
Business Unit Manager



Timo Herwix
Senior Consultant





GOD III

Two become Hyand Ranked among the top 15 IT service providers in Germany

> 900
Employees
(of which 160 in
shoring locations)

> 150
Clients

> 10
Industries

16
Locations

1

Introduction

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Q&A



CO₂-earth

Latest Daily CO₂

A reminder that our world is pushing the planet's thermostat beyond safe levels of 350 ppm CO₂, and that more people are needed to combine our ingenuity and resources to keep the present overshoot brief.

Apr. 13, 2024	425.70 ppm
Apr. 12, 2023	423.23 ppm
1 Year Change	2.47 ppm (0.58%)

Last CO₂ Earth update: 2:35:03 AM on Apr. 14, 2024, Hawaii local time (UTC -10)

It is the German law!

The state's obligation to protect resulting from Article 2, Paragraph 2, Sentence 1 of the Basic Law also includes the obligation to protect life and health from the dangers of climate change.

It can also establish an objective legal obligation to protect future generations.

2. Article 20a GG obliges the state to protect the climate.
This also aims to achieve climate neutrality.



ESG Themes at Hyand

Environmental

Social

Governance

 Carbon footprint management

 Community relations

 Compliance and risk management

 Data protection & customer privacy

 Diversity, Equity and Inclusion

 Employee engagement & well-being

 Employee health and safety

 Integration of ESG strategy

Practical measurements



What about sustainability and APEX?

<https://nielsdebr.blogspot.com/2023/07/about-sustainability-oracle-apex.html>

← Low-Code Development

My personal view on things happening in the IT industry with a clear focus on low-code development.



About sustainability & Oracle APEX



- July 10, 2023



The climate crises is here and immediate counteracting is required to prevent worse. Key is to take into account environmental and social aspects in each buying decision. Above all, a sustainable planet requires developed countries to consume less, a lot less.

Starting at 2025, businesses in Europe need to report their carbon footprint besides the usual regulatory financial reporting. Regarding

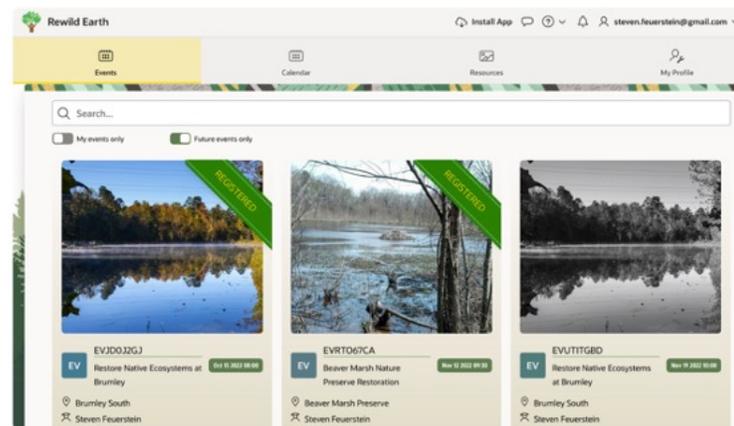
sustainability-apex.org

Climate change is one of the greatest threats life on planet earth has faced. We need to find ways to act more sustainably and to heal our planet. Here are some APEX apps that do this.

Submit your APEX reference

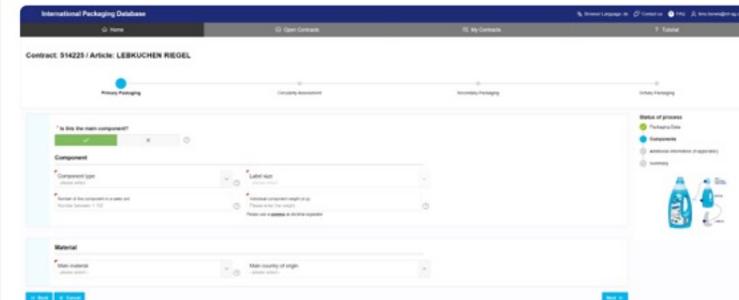
Rewild Earth - Ecosystem Restoration

Rewild Earth makes it easy to organize - and volunteer for - events to remove invasives and restore native ecosystems.



International Packaging Database

Follow the vision to contribute to a circular economy for packaging.



International Sustainability Database

Structuring and direction Sustainability



Crops, Pollinators and Pests: Phenology in a changing climate

Scientists are tracking data from fruit trees and pollinators to see how their interactions are being impacted by climate change



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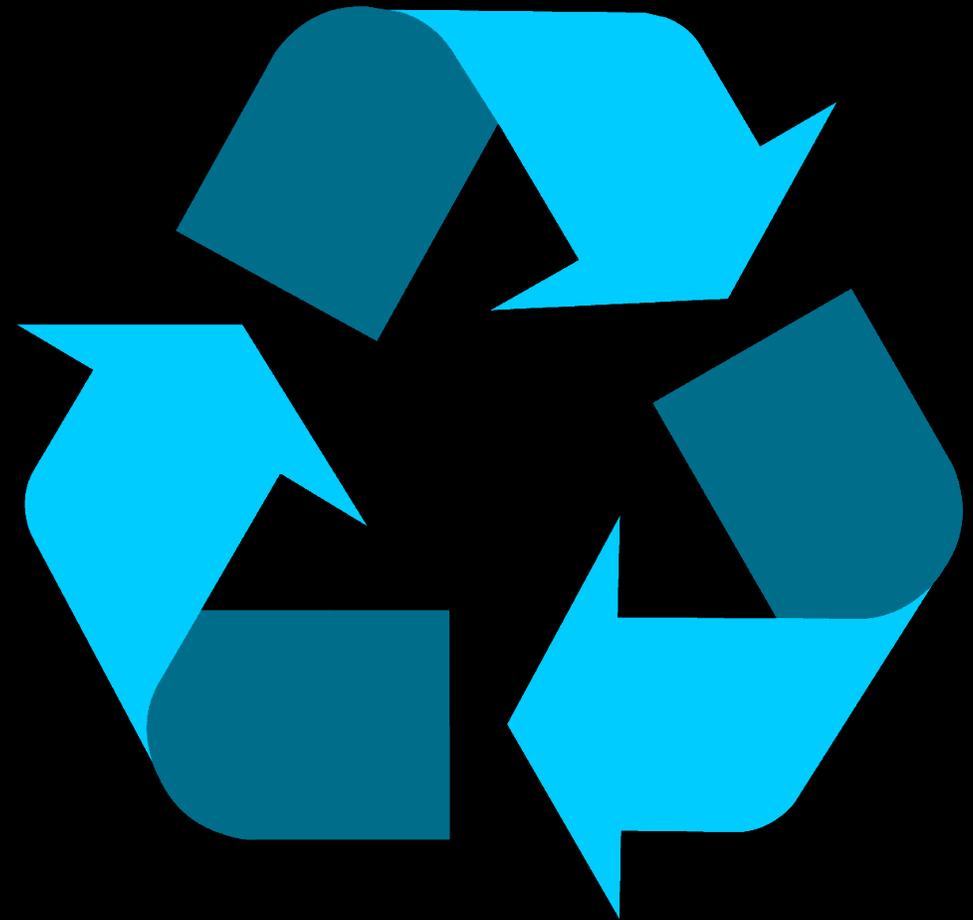
Packaging Database.



Many trading companies have received political guidelines for packaging reduction.

To do this, they need a large amount of data, which must be collected directly from suppliers. The data is then evaluated and appropriate measures are taken as a result.

The goal is reducing packaging material and using more recyclable materials.



Material Guide.

Component Classes

Each package can be broken down into different components. These components have a specific role in the packaging and therefore could be classified into different component classes. Typically, a package consists of three component classes.

Body

The body is the main component and is usually the largest part of the package and the one that encloses the product. There is only one type of this component per package.

Closure

Components classified in this class are typically responsible for ensuring product safety. Typically, closure components must be removed from the consumer to consume the product itself. In some cases, there may be more than one closure component.

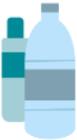
Decoration

There can often be more than one decorative component in a package. These components are usually used for marketing purposes and contain product information.



Packaging Types

Let's start defining your packaging for the recyclability self-assessment. First up, choose what type of packaging you want to use here. If your type of packaging is not listed or you can't find it, you can always go ahead and use the "Other component" packaging types.

 Film/Flow-Pack	 Bottle	 Tray/Foodtainer	 Can	 Wrapper
 Blister	 Bucket	 Canister	 Box/Crate	 Cup/Pot/Tub
 Banderole/Header/ Cuff/Sleeve	 Beverage Carton	 Tube	 (Shrink) Sleeve	 Label

Cancel

Component

Component class
Body

Component type
Bottle

Label size
- please select -

How many of these components are used per sales packaging?
1

Please only enter the weight of the single packaging component in g (without product).
100.00

Please use a dot as decimal separator

Material

Main material
Glass

Additional information for glass

Glass Type

Borosilicate glass



Glass Color

Green



Lacquers

Protective lacquers/coatings



Adhesives

Removabel label



Non ferromagnetic components



Bottle shapes

Please select the Bottleshape (optional)

Bordeauxflasche



Burgunderflasche



Champagnerflasche



Flûte



Flûte à Corset



Hollandaise



Muscadetflasche



Other



Component

Component class
Closure

Component type
Cap / Closure / Dispenser

Label size
- please select -

How many of these components are used per sales packaging?
1

Please only enter the weight of the single packaging component in g (without product).
10.00

Please use a **dot** as decimal separator

Material

Main material
Aluminum

Details for aluminium

>50% aluminium
yes

Component

Component class
Decoration

Component type
Label(s)

Label size
< 2/3

How many of these components are used per sales packaging?
1

Please only enter the weight of the single packaging component in g (without product).
2.00

Please use a **dot** as decimal separator

Material

Main material
Paper and/or cardboard

Type and certification

Major paper/cardboard type
Paper

Description of other paper
Please describe.

Certification
FSC 100%

>70% recycled content
✓ ✗



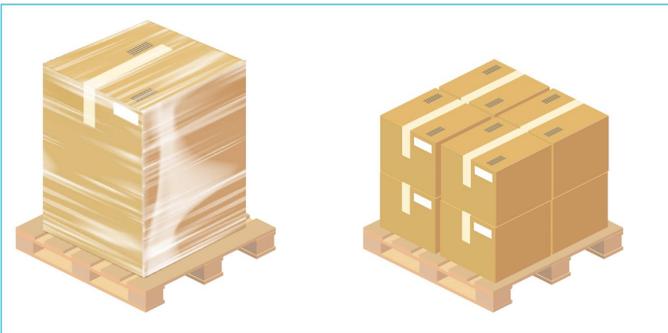
PRIMARY/SALES PACKAGING

Packaging, conceived so as to constitute a sales unit to the final user or consumer at the point of sale and its intended use is to be taken home.



SECONDARY/GROUPED PACKAGING

Packaging serves only as a means to replenish the shelves at the point of sale; it can be removed from the product without affecting its characteristics and its intended use is to not be taken home by the consumer.



TERTIARY/TRANSPORT PACKAGING

Packaging conceived so as to facilitate handling and transport of a number of sales units in order to prevent physical handling and transport damage. Transport packaging does not include road, rail, ship and air containers.

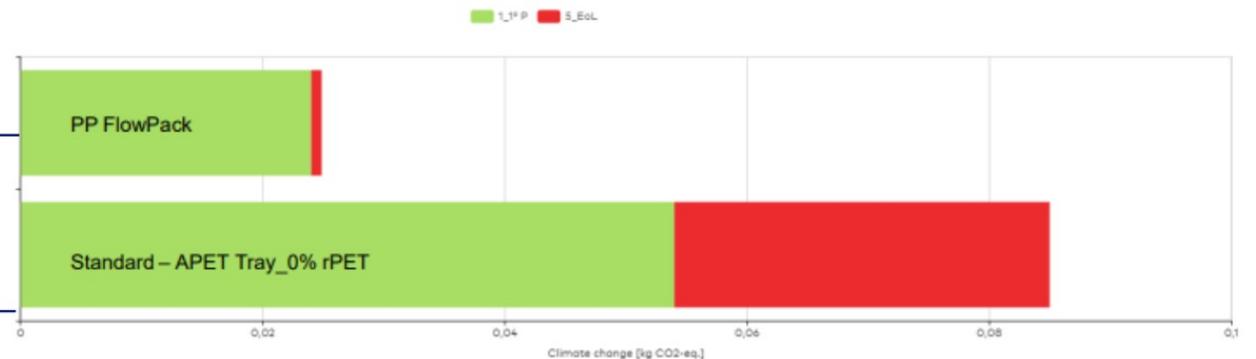
Sustainable Packaging at a Glance

PP flowpack versus PET tray



A PET tray will have a much higher environmental footprint than a PP flowpack assuming that the PET tray will not be recycled(*) but the PP flowpack will be.

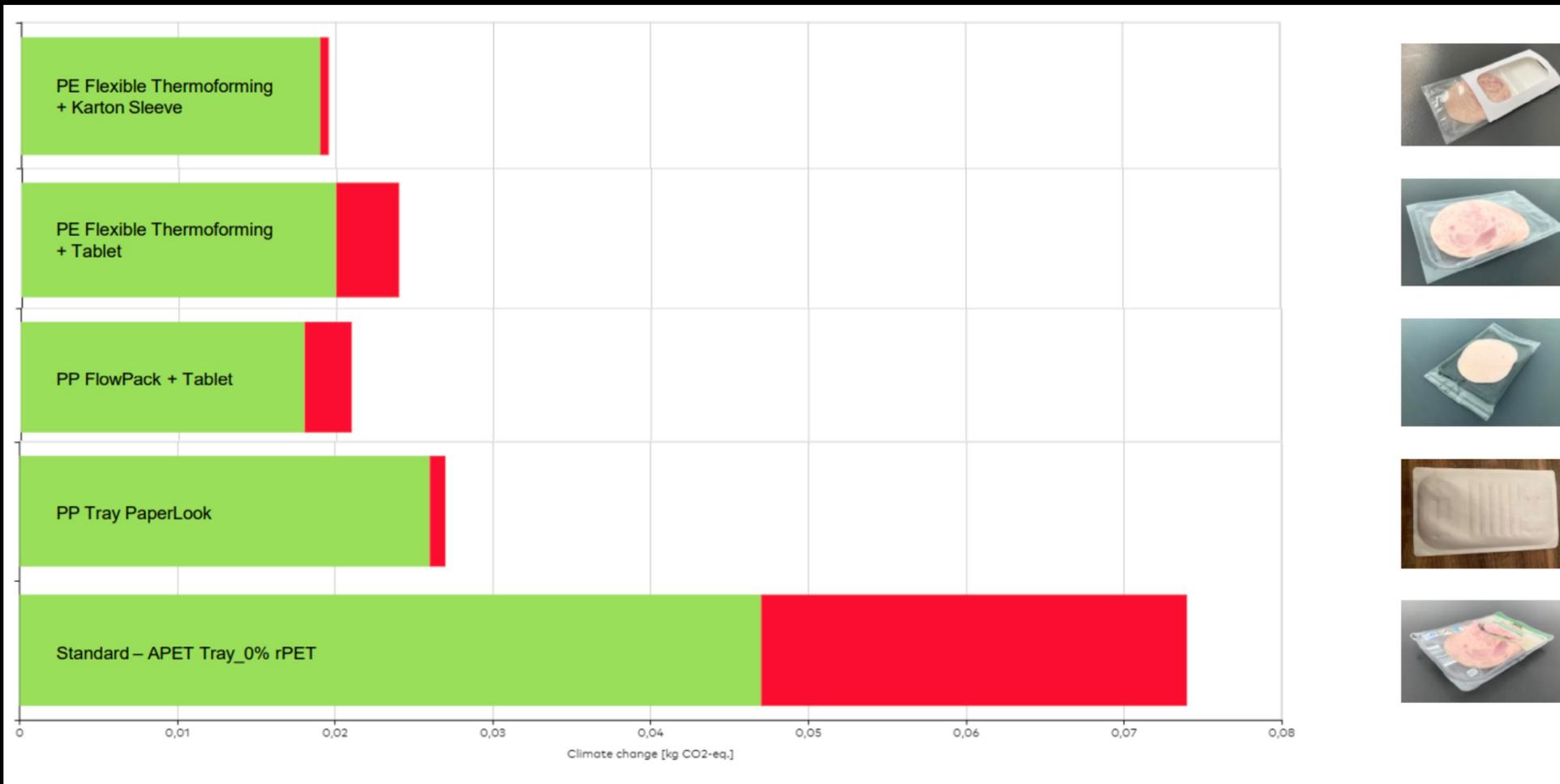
***The recyclability knowledge we built up (AIRG) is an ideal basis for accurately assessing the footprints of our packaging.**



The comparison of CO₂ equivalents greatly **improves the quality of analysis**, **reduces the complexity** of packaging comparisons and **simplifies communication** with purchasing departments.

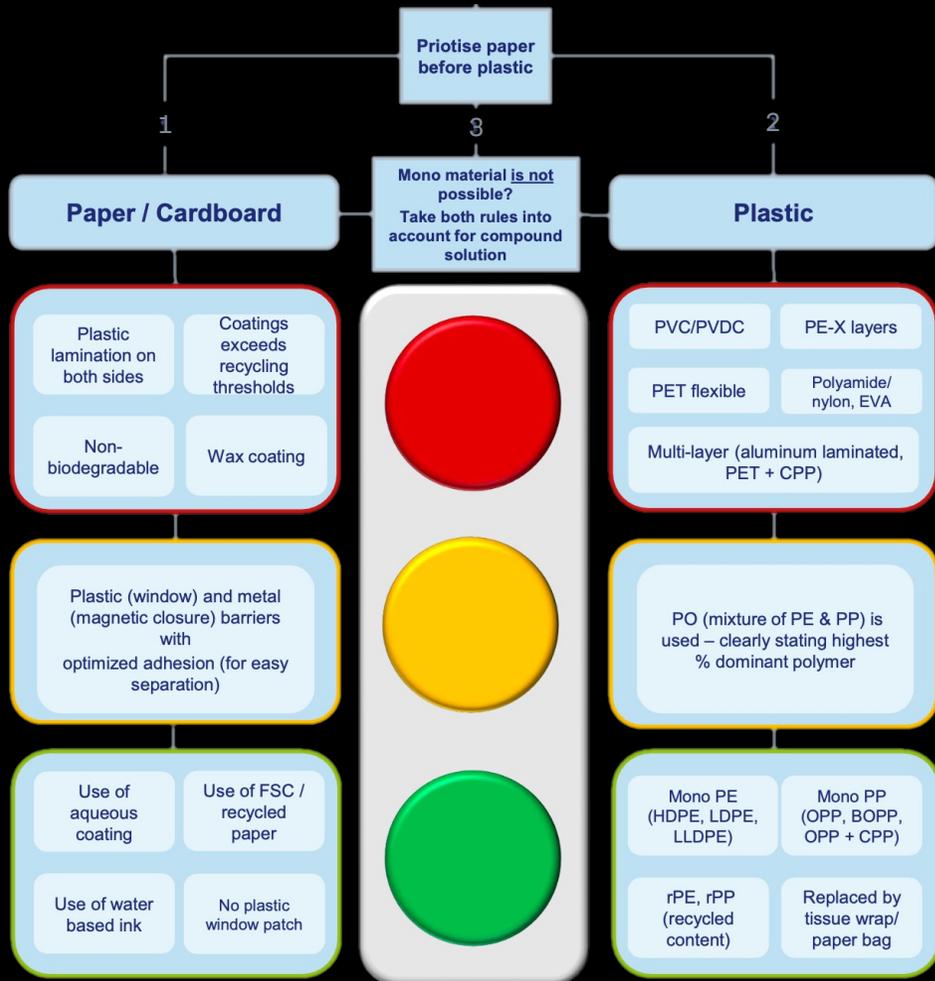
Sustainable Packaging at a Glance

Comparison of packaging for cold meats



Sustainable Packaging at a Glance

Recyclability



Article name	Suppenfleisch, 500g
Number of components	4
Total weight	27.75 g
Komponenten	
Tray	
Function	Main component
Weight	23
Material	PP
Color	Transparent
Foil/Film/Flow-Pack	
Function	Closure
Weight	2.89
Material	a-PET/EVOH/PE-HD/PP/PA
Color	Transparent
Label	
Function	Decoration
Weight	1.04 g
Material	Paper
Absorbent Pad	
Function	Decoration
Weight	0,82 g
Material	PP

$$R = \frac{(23 * 1) + (2.89 * 0) + (1.04 * 0.5) + (0.82 * 0.5)}{27.75} * 100 = 86.23\%$$

Achievements

- From 2020 to 2022, we have already achieved a reduction of more than **80,000 tons** of packaging material in our supply chain.
- In the 2023 financial year, around **75%** of our packaging was recyclable. The recyclability of packaging is a prerequisite for producing valuable secondary raw materials that can ideally be reused for packaging.
- Our recycled content in plastic packaging was around **15%** in the 2023 financial year.



+200.000
Articles
since 2022

+300
Articles
per day

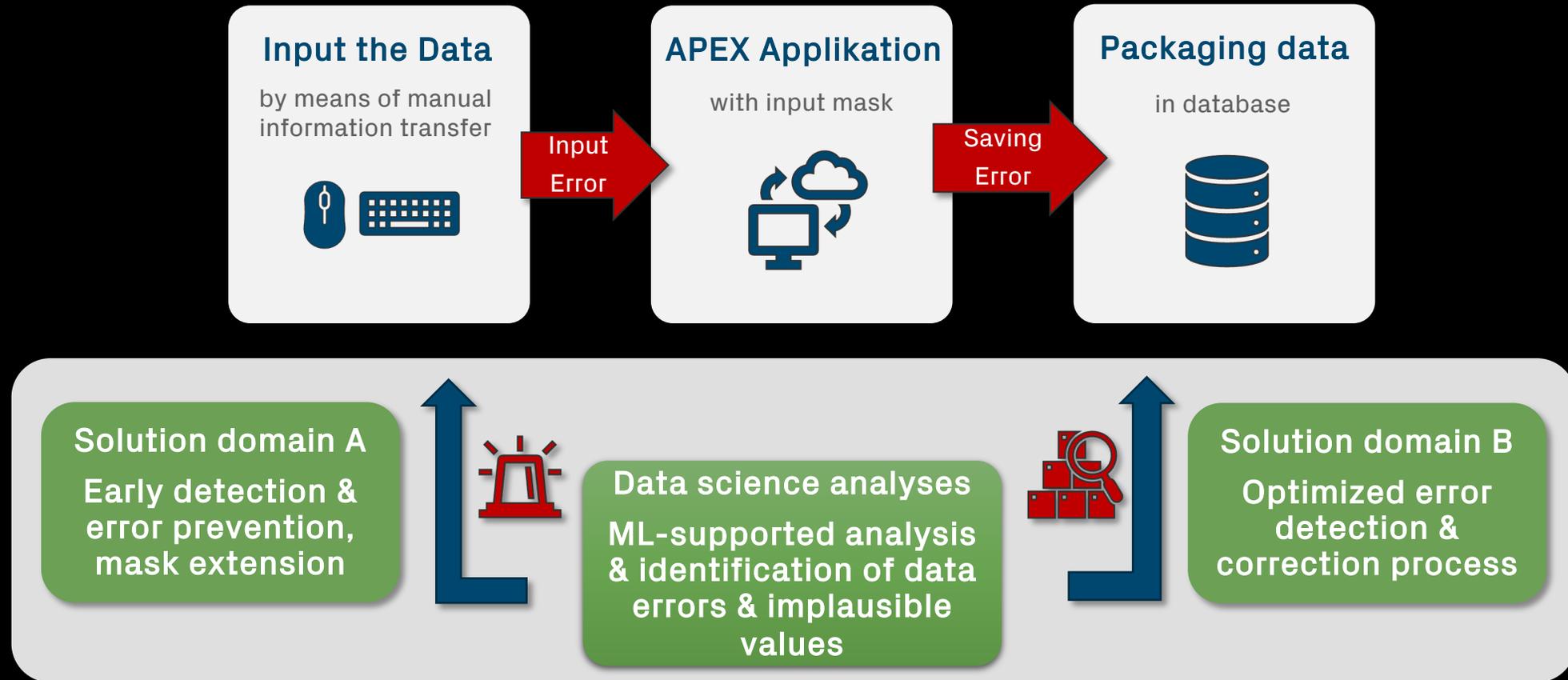
+10.000
User

+500
Accesses per
day

24/7



Integration of Machine-Learning Processes



Sustainability Database.

Sustainability Database

A lot of trading companies can no longer avoid the topic of „Sustainability“.

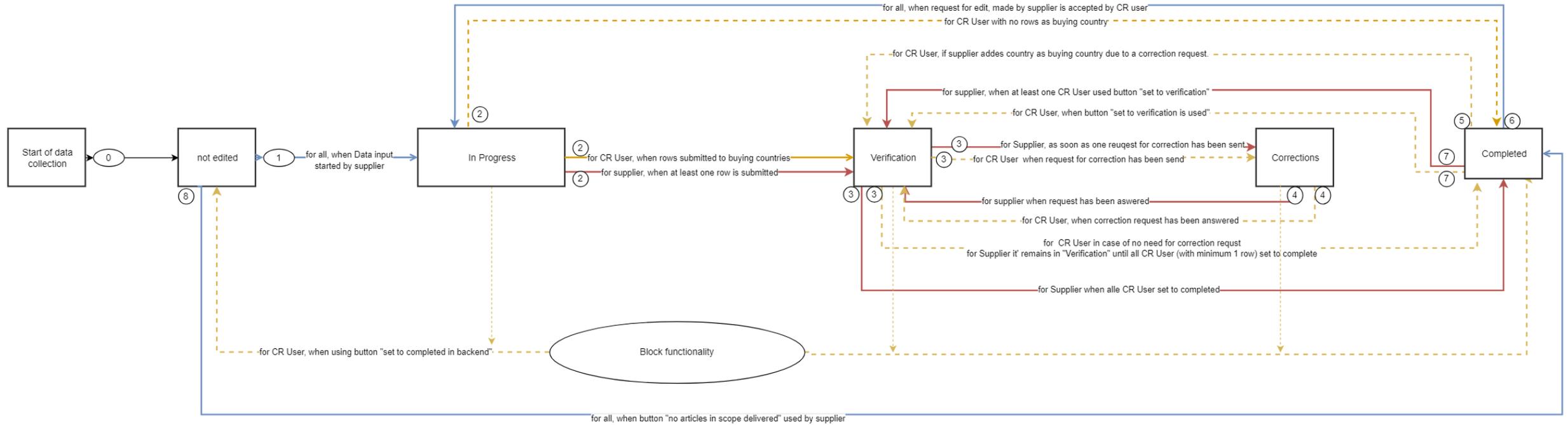
Sustainability is based on clear strategies, ethically correct and legally compliant behavior and efficient organizations.

The selection of focus areas and corporate responsibility programs provides a clear path.

The goal is to enable safe and responsible consumption without a guilty conscience.



Workflow



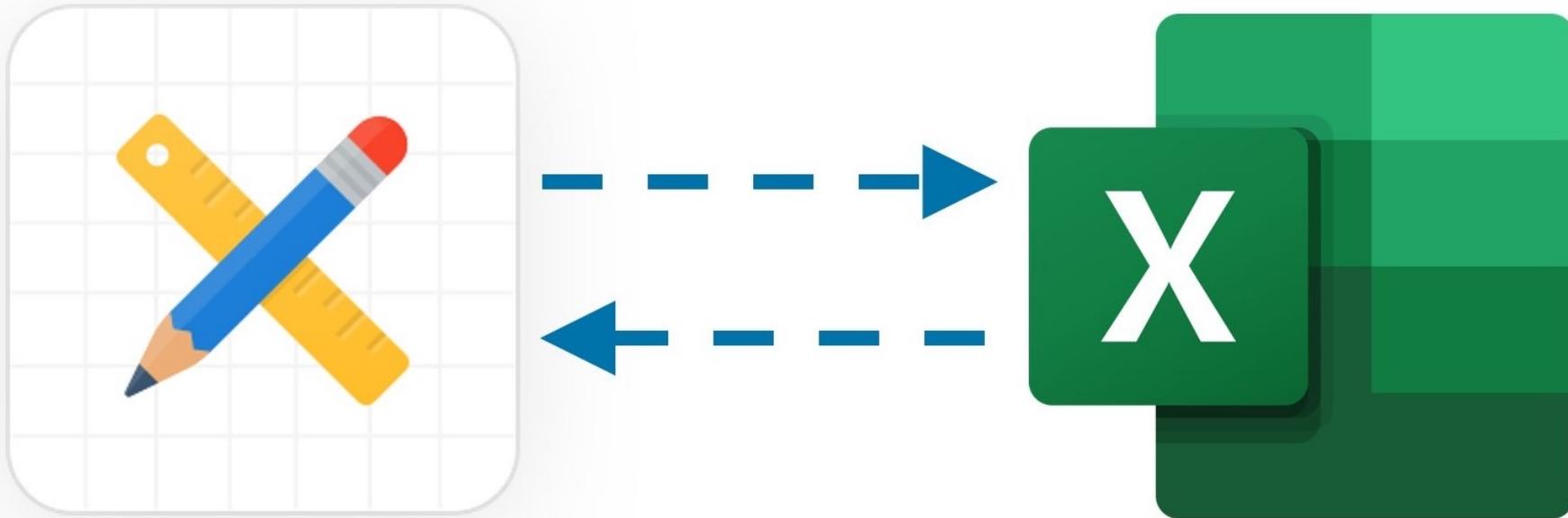
Overview

Product	Supplier Name	In Progress since	Deadline	Progress Status	Action
Palm oil 2023	CABAY	17.01.2024	-	In Progress	The data will be verified
Egg 2023	KELLERMANN GMBH&CO.KG	-	-	Completed	Show details
Tea 2023	KELLERMANN GMBH&CO.KG	17.01.2024	22.01.2024	In Progress	Edit
Cocoa 2023	KELLERMANN GMBH&CO.KG	26.01.2024	16.02.2024	In Progress	Edit
Timber 2023	KELLERMANN GMBH&CO.KG	21.01.2024	07.02.2024	In Progress	Edit
Coffee 2023	KELLERMANN GMBH&CO.KG	29.01.2024	22.01.2024	In Progress	Edit
Cocoa 2023	SCANDIC FOOD A/S	30.01.2024	25.01.2024	In Progress	Edit
Vegan + Vegetarian 2023	KELLERMANN GMBH&CO.KG	-	11.02.2024	In Progress	Edit

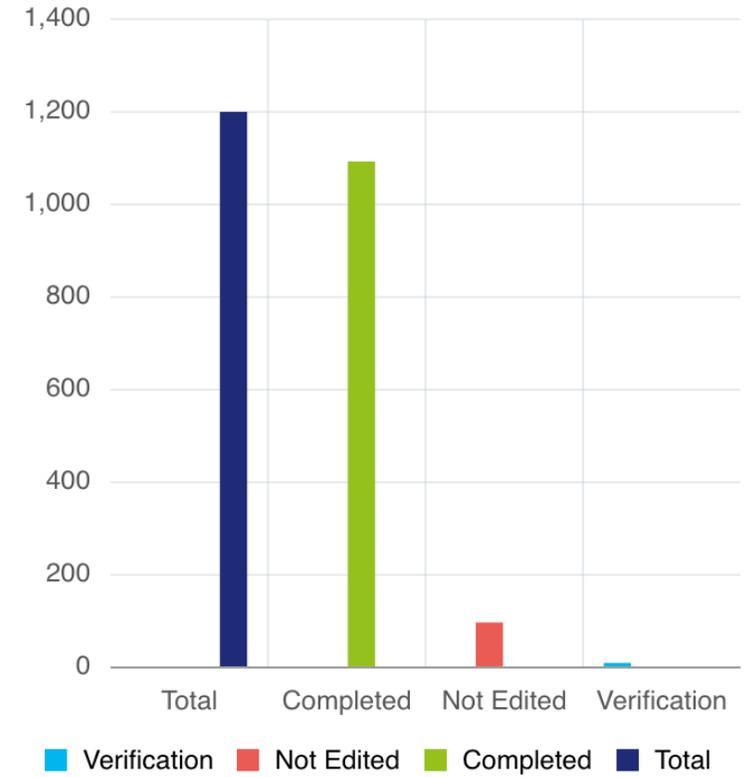
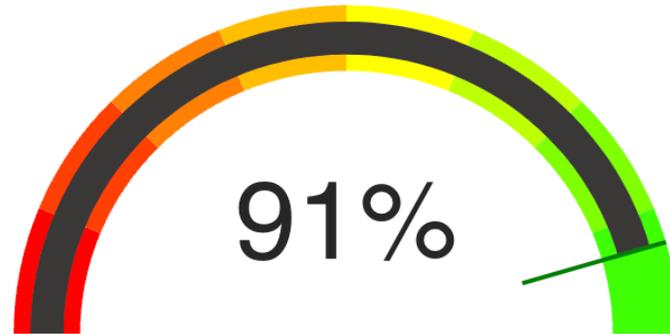
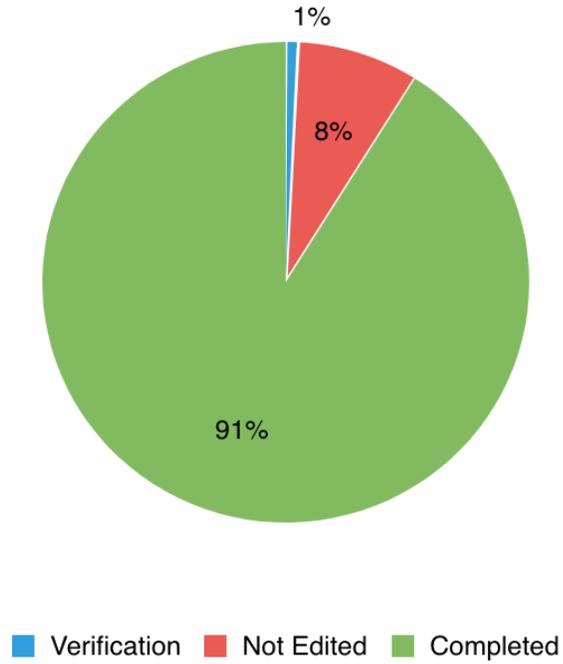
Data Input

Coffee Data								Certification standard/s of the article / raw material resp. grower / cooperative. Please tick the box(es) for the certification standards applicable to this article (variety)		
Col.Nr. 10	Col.Nr. 11	Col.Nr. 12	Col.Nr. 13	Col.Nr. 14	Col.Nr. 15	Col.Nr. 16	Col.Nr. 17	Col.Nr. 18	Col.Nr. 19	Col.Nr. 20
Weight per article [g]	Total quantity delivered in retail units [#]	Total quantity delivered [kg]	Percentage of coffee [%]	Total quantity of coffee delivered [kg]	Country of processing / packing of coffee	Country of origin of the coffee	Region of origin of coffee	Rainforest Alliance	Fairtrade (all that can be)	EU-Bio
500	208800	104400	7	7308		India - IND (356), Brazil - BRA (076)	India - IND (356), Brazil - BRA (076)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
500	339120	169560	9	15260.4		India - IND (356), Brazil - BRA (076)	India - IND (356), Brazil - BRA (076)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
500	130320	65160	7	4561.2		India - IND (356), Brazil - BRA (076)	India - IND (356), Brazil - BRA (076)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
500	180960	90480	7	6333.6		India - IND (356), Brazil - BRA (076)	India - IND (356), Brazil - BRA (076)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
500	305040	152520	9	13726.8		India - IND (356), Brazil - BRA (076)	India - IND (356), Brazil - BRA (076)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
500	118080	59040	4	2361.6		India - IND (356), Brazil - BRA (076)	India - IND (356), Brazil - BRA (076)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
100	449316	44931.6	18	8087.69		India - IND (356), Brazil - BRA (076)	India - IND (356), Brazil - BRA (076)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
180	906552	163179.36	7	11422.56		India - IND (356), Brazil - BRA (076)	India - IND (356), Brazil - BRA (076)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
200	428988	85797.6	16	13727.62		India - IND (356), Brazil - BRA (076)	India - IND (356), Brazil - BRA (076)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
200	443568	88713.6	14	12419.9		India - IND (356), Brazil - BRA (076)	India - IND (356), Brazil - BRA (076)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
275	135828	37352.7	10	3735.27		India - IND (356), Brazil - BRA (076)	India - IND (356), Brazil - BRA (076)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
275	2304	633.6	10	63.36		India - IND (356), Brazil - BRA (076)	India - IND (356), Brazil - BRA (076)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
275	85140	23413.5	10	2341.35		India - IND (356), Brazil - BRA (076)	India - IND (356), Brazil - BRA (076)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
250	47808	11952	7	836.64		India - IND (356), Brazil - BRA (076)	India - IND (356), Brazil - BRA (076)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
250	47808	11952	9	1075.68		India - IND (356), Brazil - BRA (076)	India - IND (356), Brazil - BRA (076)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
200	95616	19123.2	14	2677.25		India - IND (356), Brazil - BRA (076)	India - IND (356), Brazil - BRA (076)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
250	49920	12480	7.4	923.52		India - IND (356), Brazil - BRA (076)	India - IND (356), Brazil - BRA (076)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Excel Import/Export via Excel Gateway for Oracle APEX



Monitoring



Reporting

CERTIFIED SUSTAINABLE FISH AND SEAFOOD PRODUCTS

Share of own-brand products certified with the MSC, ASC, GLOBALG.A.P. or EU organic logo as a proportion of the total number of fish and seafood products, broken down by certification standard [only online](#) (in per cent)

In 2022, around 60 per cent of our own-brand fish and seafood products were certified with one of the following sustainability standards: the largest portion was attributable to the MSC certification standard (around 62 per cent), followed by ASC certification (around 29 per cent), GLOBALG.A.P. certification (around 12 per cent) and products with the EU organic logo (around 3 per cent).

	2020	2021	2022
Belgium/Luxembourg ¹	74.3	76.8	81.4
Denmark	88.9	71.6	71.6 ²
France	54.1	57.2	57.5
Germany	85.8	83.9	78.4
Netherlands	80.6	73.7	74.4
Poland	42.2	73.5	54.0
Portugal	51.0	49.5	43.6
Spain	37.8	29.9	24.9
	60.0	59.8	60.3

CERTIFIED SUSTAINABLE COTTON

Share of sustainable cotton as a proportion of the total volume of cotton in the clothing and home textiles product groups from the standard and special-buy product ranges, broken down by certification standard [only online](#) (in per cent)

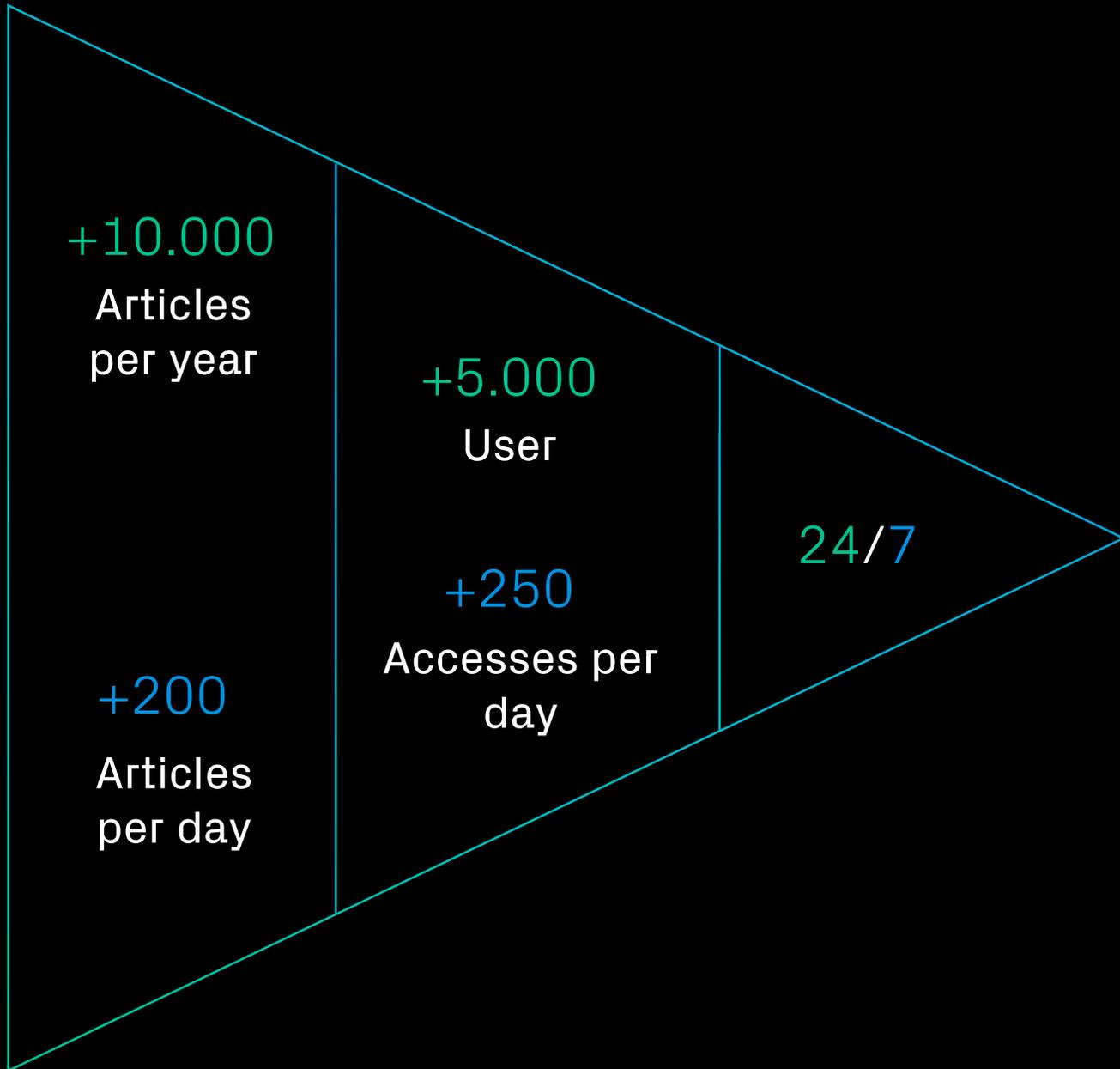
	2020	2021	2022
Belgium/Luxembourg ¹	74.7	88.9	91.2
Denmark	63.7	88.9	93.6
France	52.1	71.9	74.1
Germany	64.9	85.1	92.4
Netherlands	49.5	69.3	89.2
Poland	64.8	89.3	93.3
Portugal	76.4	89.4	92.3
Spain	68.7	65.0	95.8
	64.1	82.0	90.6

FSC®- OR PEFC™-CERTIFIED PRODUCTS

Share of own-brand products certified according to FSC® or PEFC™ as a proportion of the total number of own-brand products from the standard and special-buy product ranges with elements made of wood, board, paper, cellulose-based viscose and non-woven fabric, as well as bamboo, broken down by certification standard [only online](#) (in per cent)

FSC® 100%, FSC® MIX and PEFC™ are considered to be certification standards. In 2022, the largest portion was attributable to FSC® 100% certification (around 50 per cent followed by FSC® MIX certification (around 36 per cent), and PEFC™ certification (around 14 per cent).

	2020	2021	2022
Belgium/Luxembourg ¹	97.2	94.3	97.0
Denmark	95.0	92.5	93.2 ²
France	92.6	87.9	89.2
Germany	95.2	94.2	94.1
Netherlands	90.7	86.3	87.7
Poland	89.8	94.0	89.9
Portugal	96.7	95.2	93.3
Spain	97.5	97.9	96.0
	93.2	92.6	92.1



What's Next?!

FREEDOM **SAFETY** **DIGNITY**
EDUCATION **JUSTICE** **HOPE**
PEACE **HUMANITY** **EQUALITY**



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Are you interested?



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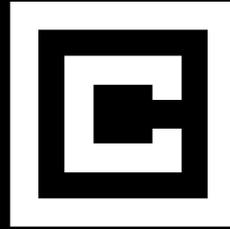
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