



Reducing carbon footprint

Marjon van Diepen – Project Lead Sustainability
March 2025



**Dutch
Flower
Group**

Strategy Dutch Flower Group

Together we create a happier & greener world

We put our customer first, and at the same time, we are striving to be the number one employer in the floriculture sector and the preferred partner for our key growers.

We achieve/accomplish this by continuously making our end-to-end supply chains smarter, **be a frontrunner on sustainability**, and continuing to invest in further digitalization and data-driven approaches.



CSRD - Double Materiality Analysis

Based on interviews with 600 in- and external stakeholders 7 key topics have been defined:

ESRS topics

Climate change

Pollution

Water and marine resources

Biodiversity and ecosystems

Circular economy

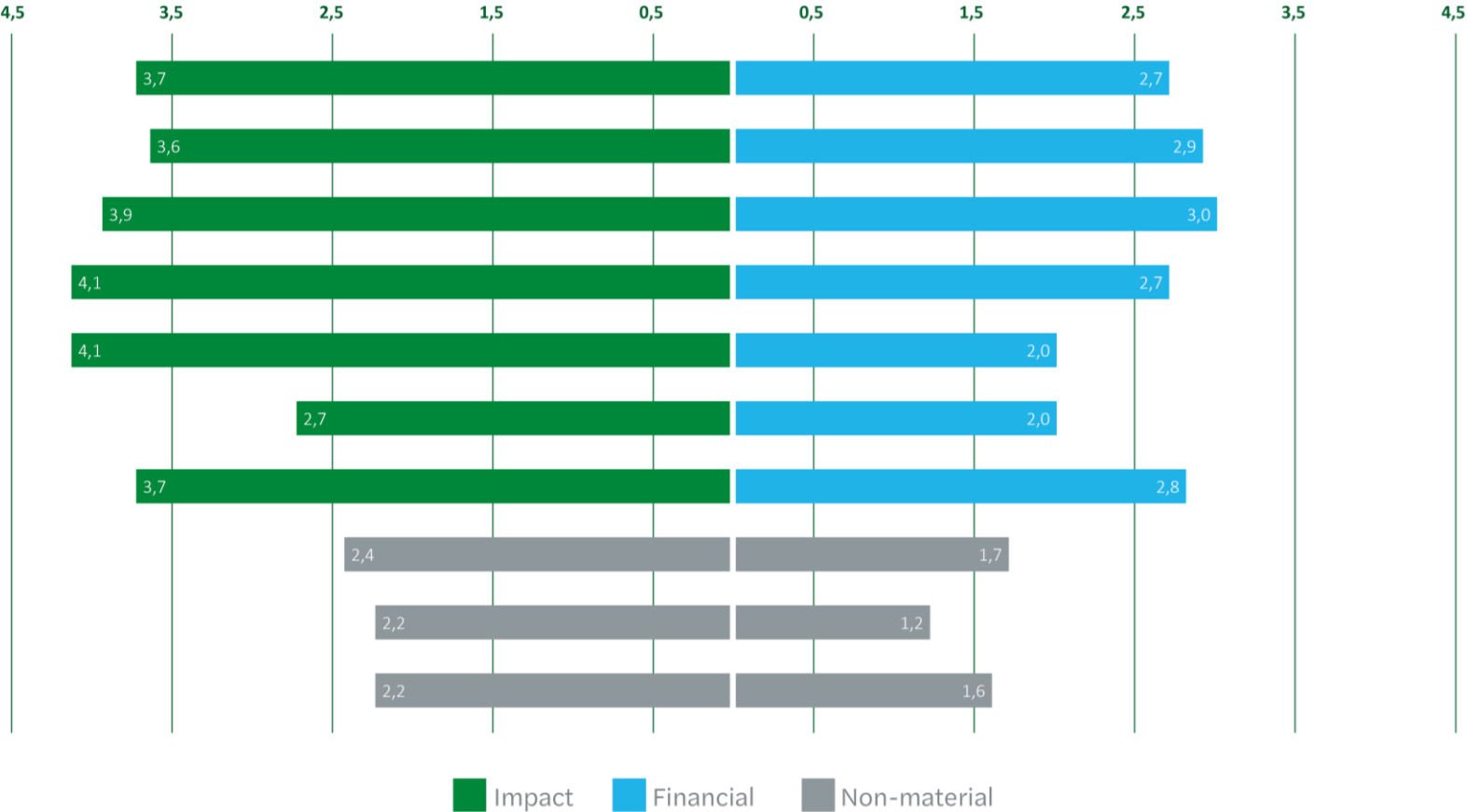
Own workforce

Workers in the value chain

Affected communities

Consumers and end-users

Business conduct



Increasing governmental requirements



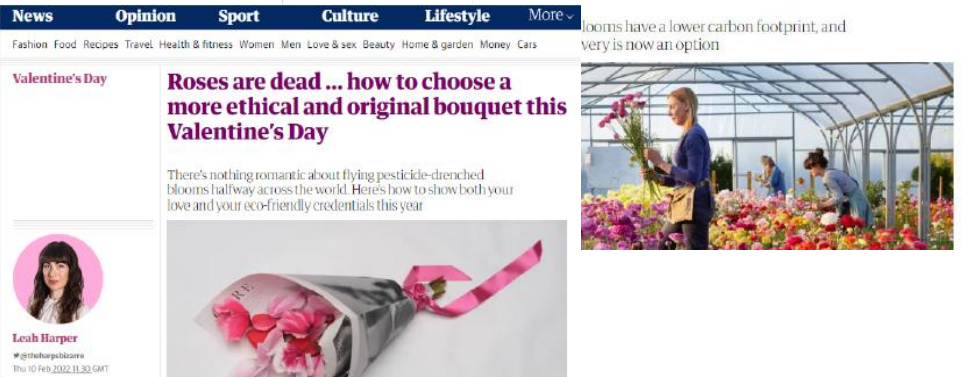
Stronger public opinion



NOS Nieuws • Vrijdag 11 oktober, 12:22

Doodsoorzaak dochter van Franse bloemist erkend: kwam door pesticiden

In Frankrijk is ophef ontstaan over het gebruik van bestrijdingsmiddelen op bloemen en de gezondheidseffecten daarvan. Na jaren van onderzoek en procederen hebben twee ouders een schadevergoeding gekregen na het overlijden van hun kind.



Lubach neemt bloementelers op de hak



Gemeente Zutphen doet bosje bloemen in de ban: 'Spoor van verboden pesticiden'

Artikel door RTL Nieuws • 1 w • 3 minuten leestijd

Steeds meer gemeenten doen een boeket snijbloemen als cadeautje in de ban, en meerdere gemeenten overwegen dat te doen. Nu volgt ook Zutphen. Bewoners noemen de maatregel 'belachelijk en betuttelend'.

Geen bosje bloemen dus voor de Zutphense bewoner die vandaag 101 jaar oud wordt, maar een duurzamer alternatief, namelijk een plant. "Een plant is duurzaam en dat past helemaal bij waar wij als gemeente voor staan", zegt een woordvoerder van de gemeente Zutphen.

ÖKO-TEST RICHTIG GUT LEBEN				
TEST Rosensträuße				
	Kaufhaus Rosensträuße 13 Stille in Farbe (10)	Aldi Süd Rosen	Blume 2000 Gala Art.-Nr. 740	Revo Fairtrade Rosen Spice
Anbieter				
Anzahl der Rosen / Preis	13 Rosen / 1,99 Euro	9 Rosen / 1,99 Euro	10 Rosen / 3,99 Euro	10 Rosen / 3,99 Euro
Erzeugerland	Äthiopien	Äthiopien	Kanien	Kanien
Anzahl der nachgewiesenen Pestizide	8	6	12	14
Oben benannte bedenkliche Pestizide	gering	keine	4	4
Gesamtgehalt der nachgewiesenen Pestizide	gering	akzeptabel	akzeptabel	akzeptabel
Testergebnis Pestizide	gut	befriedigend	ausreichend	ausreichend
Label (deklarierte Zertifikat-Nummer)	kein	MPS-GAP (802683)	Fairtrade (F.O-ID 19723)	Fairtrade (3768), Pro Planet (1810.001)
Zertifikat laut Anbieter	kein	MPS-A	Fairtrade	Fairtrade und MPS-A
Mitverantwortung des Handels beim Pestizideinsatz	ja	ja	ja	kein
Sichere und faire Übergabe der im Handel kommenden Rosen	ja	ja	ja	ja
Testergebnis Transparenz	befriedigend	befriedigend	sehr gut	sehr gut
Anmerkungen	5)		3)	
Gesamtergebnis	befriedigend	ausreichend	ausreichend	ausreichend

Higher customer requirements



COUNTRIES GOALS 2022

Description of goals

55% reduction in greenhouse gas emissions by end of 2030 (baseline 2020)

ALDI Nord Group of Companies commits that 75% of its suppliers by emissions covering purchased goods and services will have science-based targets by 2024

15 november 2022

Albert Heijn verscherpt ambitie CO2-reductie in de toeleveringsketen

Van 15% naar 45% reductie in 2030

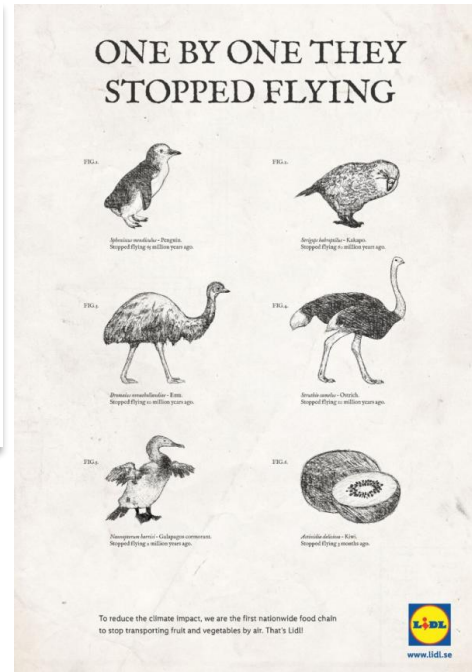
Albert Heijn scherpt de ambitie aan voor de reductie van CO₂-uitstoot in de keten (Scope 3) van 15 naar 45% in 2030 (ten opzichte van 2018). 'Samen beter eten bereikbaar maken. Voor iedereen.', vanuit deze missie neemt het bedrijf continu initiatieven om de wereld beter achter te laten. De eigen bedrijfsvoering – winkels, distributiecentra en kantoren – is al volledig klimaatneutraal. Ook in de toeleveringsketen worden er voortdurend stappen gezet. Zo is nu de exacte uitstoot in de kip- en varkensketen in kaart gebracht. "Het aanscherpen van onze ambitie om de CO₂-uitstoot terug te dringen met 45% in 2030 in de hele keten met al onze [toe]leveranciers is een serieuze stap. Wij willen onze beweging naar een leefbare aarde concreet invullen en ik ben ervan overtuigd dat als we samenwerken met alle leveranciers, deze ambitie stap voor stap haalbaar is," stelt Marit van Egmond, CEO van Albert Heijn.

Sustainability

Since we set up shop in 1869, we've always had a strong sense of social, environmental and economic responsibility and an understanding that our success depends on society's success. We want to help everyone eat better and through our sustainability agenda we are helping to drive lasting, positive change in the UK and internationally.

We are proud to be the Principal Supermarket Partner of COP26, the United Nations Climate Change Conference.

Sainsbury's
Helping everyone eat better



Reducing greenhouse gas emissions in our supply chain



We will **encourage our strategic suppliers**, who are responsible for 75% of product related emissions, to set their **own science-based emissions targets** by 2024.

Onze ambitie: verpakkingsreductie en gebruik recyclebaar en gerecycled materiaal

In 2025 willen we het totale verpakkingsgewicht hebben gereduceerd met 25% ten opzichte van 2018. Ook moeten dan alle verpakkingen recyclebaar zijn. Dit geldt voor al onze huishoudverpakkingen en de verpakkingen voor eigen gebruik in de winkel, zoals vuilflessen bij de sinaasappelpersautomat en zakjes bij de brood- en groenteafdeling.

Daarnaast hebben we ons gecommitteerd aan de doelstellingen van het [Nederlandse Plastic Pact](#) voor 2025. De belangrijkste doelen zijn het 100% recyclebaar maken van plastic producten en verpakkingen en 20% minder plastic gebruiken dan in 2017. Een ander doel is het toevoegen van gerecycled plastic: alle plastic producten voor eenmalig gebruik moeten in 2025 bestaan uit minimaal 35% gerecycled plastic.

JUMBO

Working together against climate change

We are confronted with the consequences of climate change every day: high temperatures, heavy rainfall, and floods are becoming more and more common. It has a huge impact on our living environment and on nature. It also has consequences for food security and the availability of raw materials. Climate change is largely caused by CO₂e emissions. A significant part of these emissions, approximately 30 percent worldwide, comes from the food industry ([Nature, 2021](#)). As an important player in the Dutch food industry, Jumbo feels responsible for ensuring that these emissions are reduced.

DID YOU KNOW THAT...

- ✓ After the energy sector, the food industry is the highest emitter of CO₂? ([source](#))
- ✓ On average, the Dutch emit 16 tons of CO₂e per year? ([source](#))
- ✓ As a company, Jumbo emits approximately 8 million tons of CO₂e every year? (source: Annual Report)



TARGET 2030
• 85%
• Climate-neutral in 2040



TARGET 2050
• 50%
• Climate-neutral in 2050

Human rights still need our attention



This year the UK will spend around **£160 million on roses**.

£6.7million will be spent on **Colombian flowers**, cultivated by workers who face **labour rights violations**.



Glastuinbouw baalt van 'moderne slavernij' in kassen: 'Westland is weer drie stappen terug'

De Westlandse glastuinbouwsector baalt als een stekker van de 'moderne slavernij' die door CNV Vakmensen werd geconstateerd bij een plantenkweker in 's-Gravenzande. Het verhaal over de uitgebuite vrouwen uit Oekraïne en Polen ging het hele land door. „Westland zet weer drie stappen achteruit.”

DEADLY BUNCH 'They'll kill me if they find me' – escaped slave reveals horrifying truth about your Mother's Day supermarket flowers

Beatings, death threats and back-breaking work - the grim truth about modern slavery across British flower farms



Controle misstanden binnen sierteeltsector

DOOR REDACTIE AALSMEER | 27 JANUARI 2023 | GEPLAATST IN AALSMEER E.O.



Aalsmeer/Uithoorn – Op het veilingterrein is donderdag 26 januari een preventieve controle gehouden tegen arbeidsuitbuiting en ernstige benadeling van kwetsbare personen, veelal niet van Nederlandse afkomst. Acht bedrijven (waaronder een uitzendbureau) werden bezocht en gecontroleerd op mogelijke misstanden binnen de sierteeltsector.



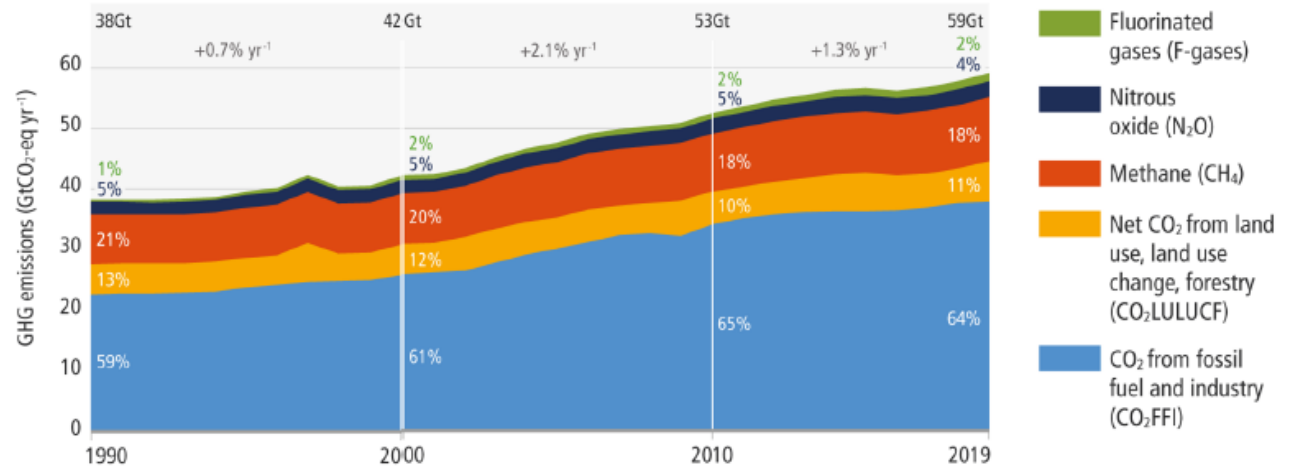
We need to reduce waste



**DON'T LET NATURE
GO TO WASTE**



We must take responsibility for our footprint



Our sustainability strategy

IMPACT2030

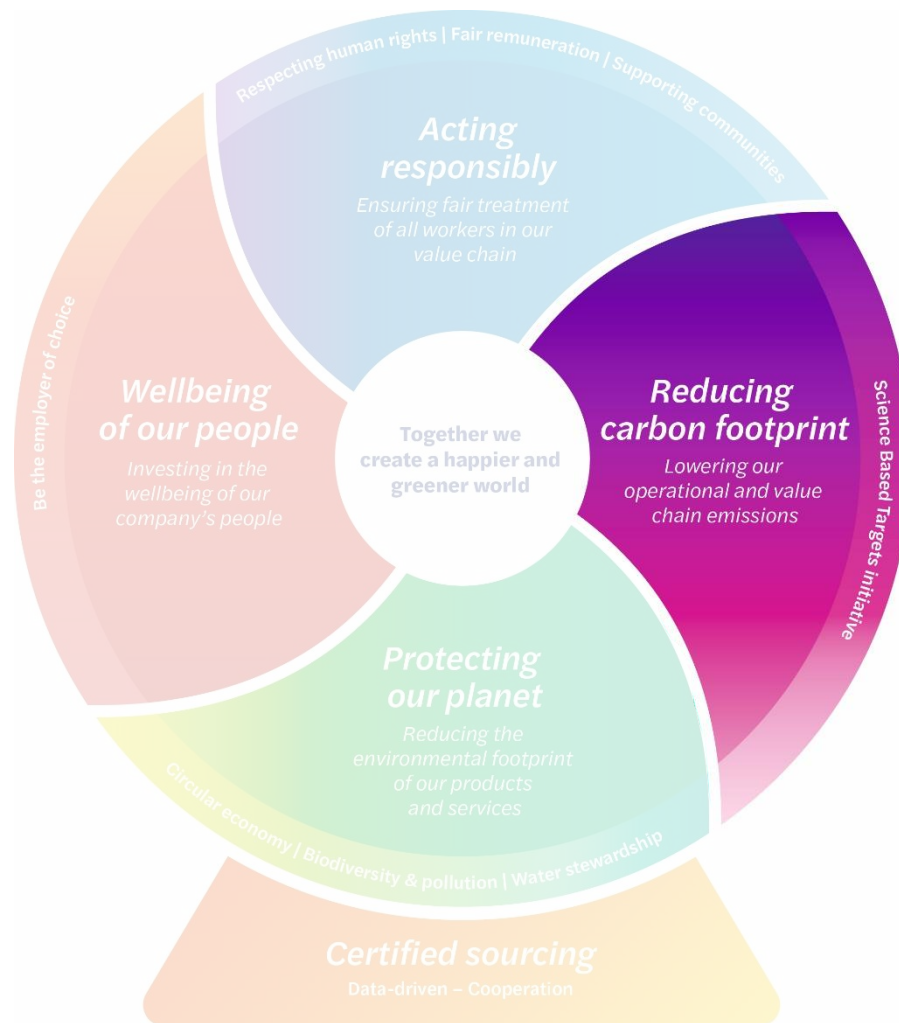


SUSTAINABLE DEVELOPMENT GOALS



Our sustainability strategy

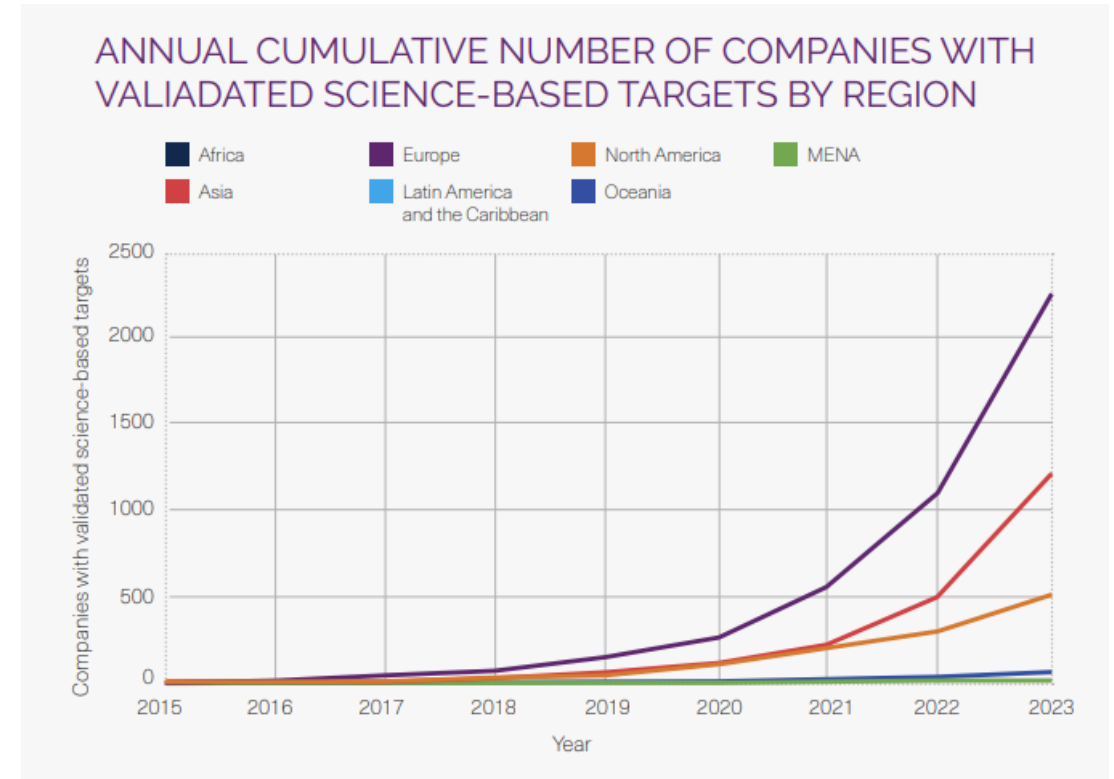
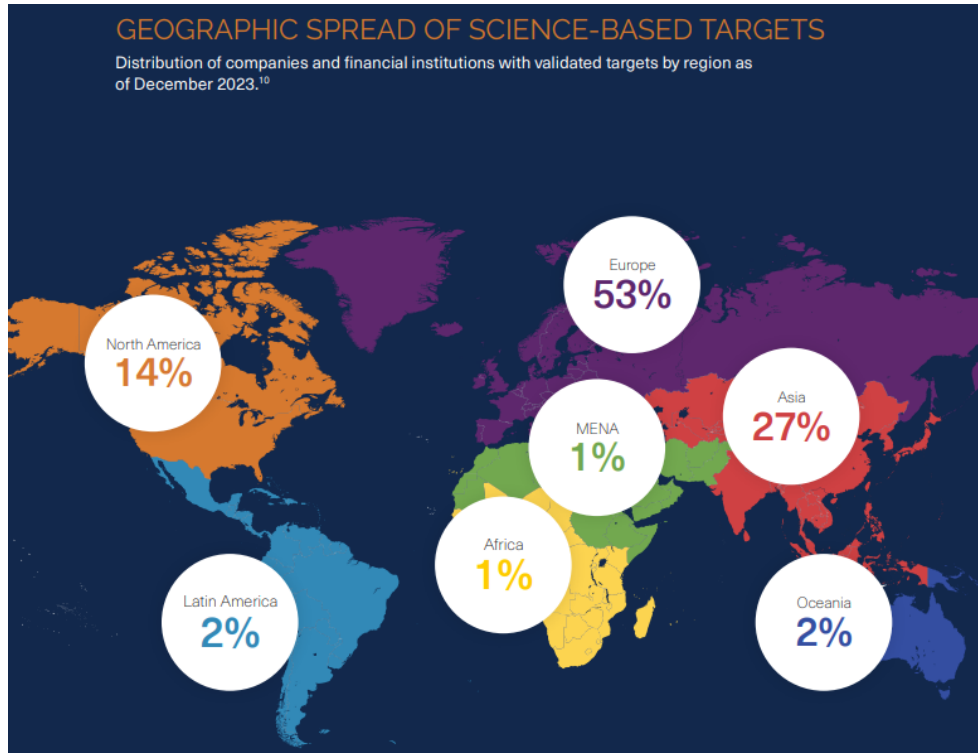
IMPACT2030



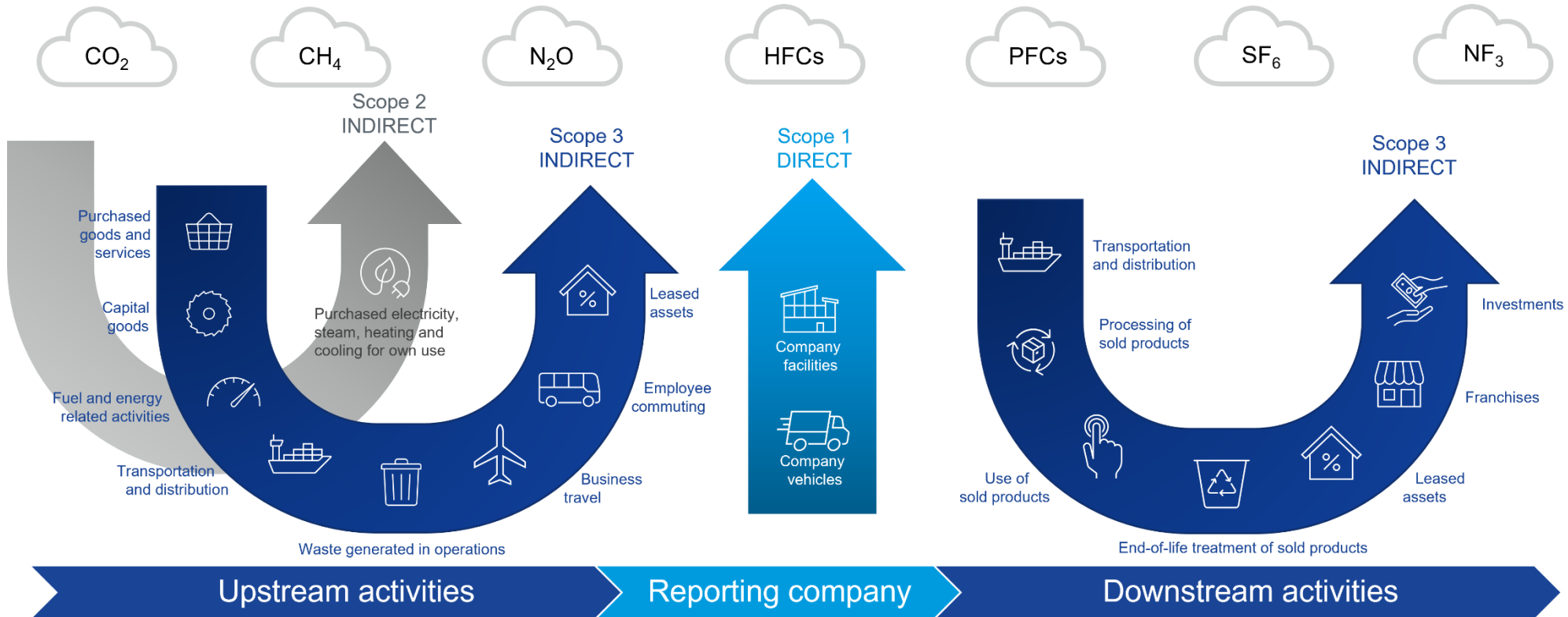
SCIENCE
BASED
TARGETS

DRIVING AMBITIOUS CORPORATE CLIMATE ACTION

Science Based Targets initiative (SBTi)



SBTi approach based on the GHG protocol



SBTi – a near-term commitment to 1,5°C

 Near-term science-based target	 Timeframe <i>What is the maximum timeframe to meet your targets?</i> 5-10 years from date of submission	 Ambition <i>What is the ambition level in terms of limiting temperature rise?</i> Scope 1 and 2: 1.5°C Scope 3: Well-below 1.5°C	 Boundary <i>How much coverage or your emissions inventory is required?</i> Scope 1 and 2: 95% Scope 3: If >40% of total emissions, 67% coverage	 Methods <i>What are the eligible methods to set your targets?</i> 1. Absolute reduction 3. Renewable electricity 4. Supplier or customer engagement
	 Long-term science-based target	2050 latest		

SBTi: our approach of scope 3



- Base year = 2021 → Target year = 2031.
- 1 average DFG value chain with 1 average packaging per product
- Primary data & secondary data

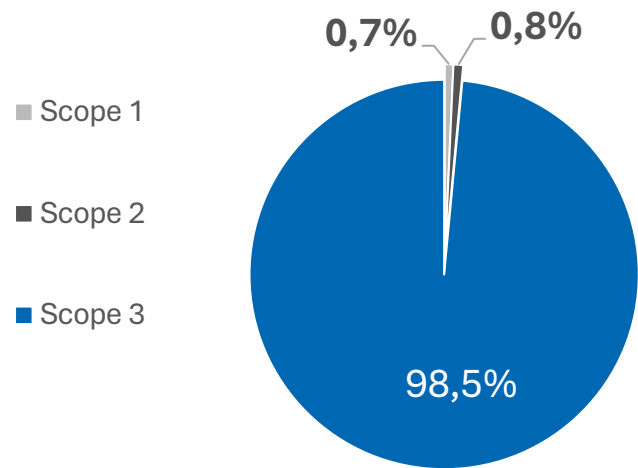


- Based on 2/3 of our assortment and calculated Product Carbon Footprints, and extrapolated the result:
 - Roses Africa (Ethiopia & Kenya), Tulips NL, Chrysanthemum NL, Gerbera NL, Carnations Turkey, Chrysanthemum Colombia, Alstroemeria Colombia, Phalaenopsis NL, Kalanchoe NL

SBTi results:

98,5% of our emissions in scope 3

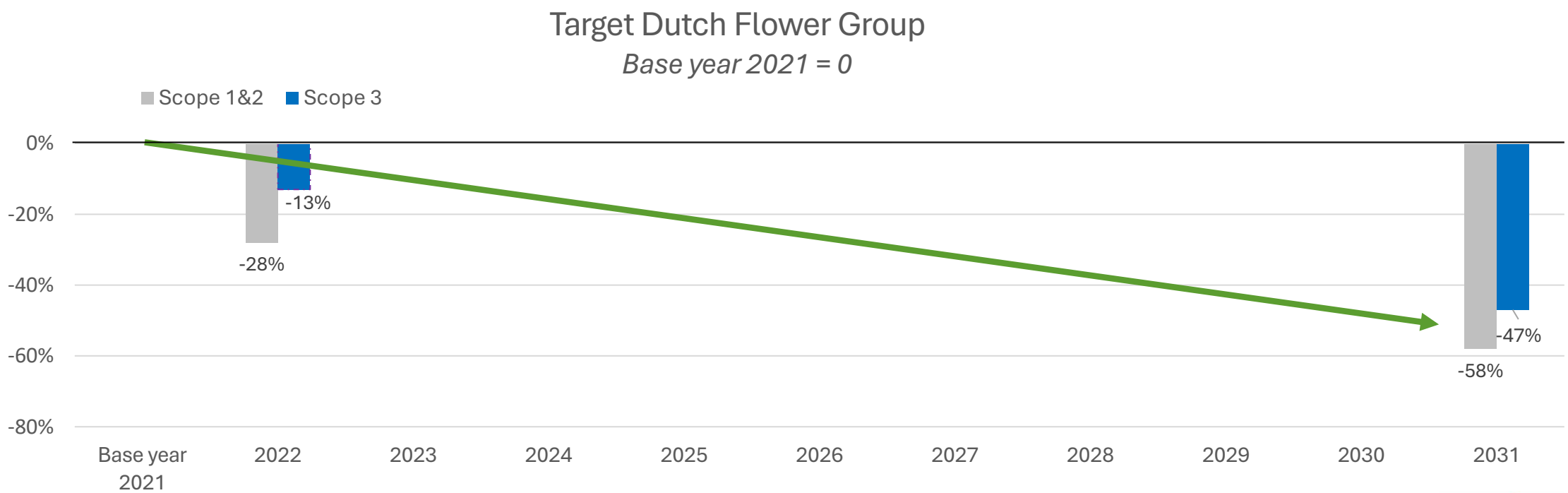
Emissions Dutch Flower Group
2021



Source: Anthesis DFG SBTi results 2021, validated

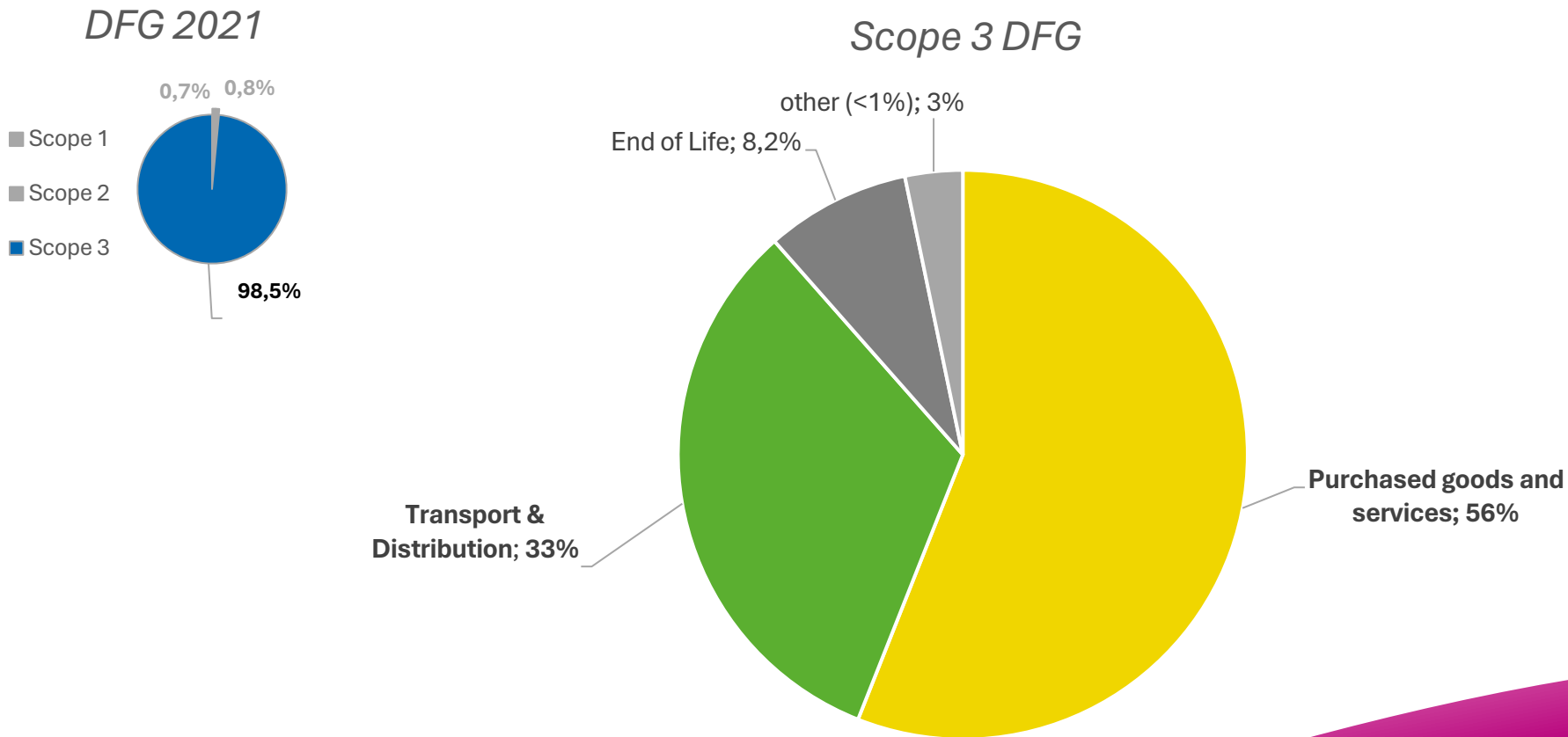
SBTi results:

Target validated and aligned with The Paris Agreement



Source: Anthesis DFG SBTi results 2021, 2022, validated targets

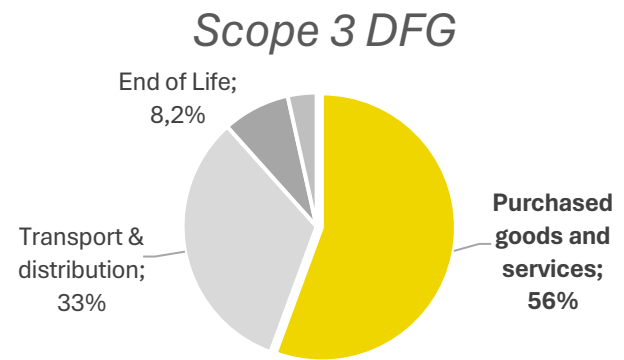
SBTi results: Hotspots scope 3



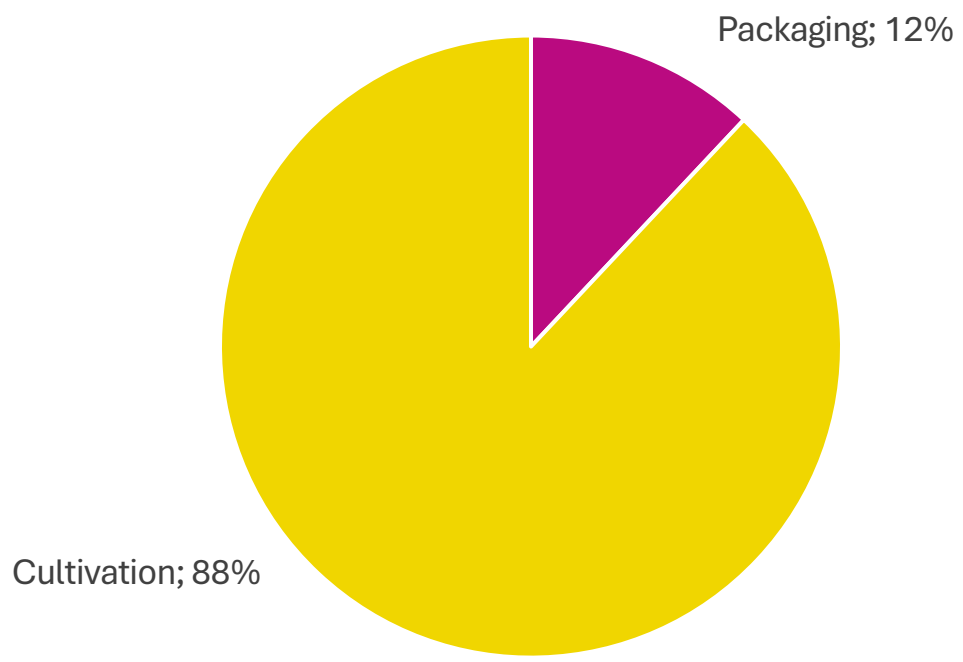
Source: Anthesis DFG SBTi results 2021 scope 3

SBTi results:

PG&S= Cultivation & Packaging



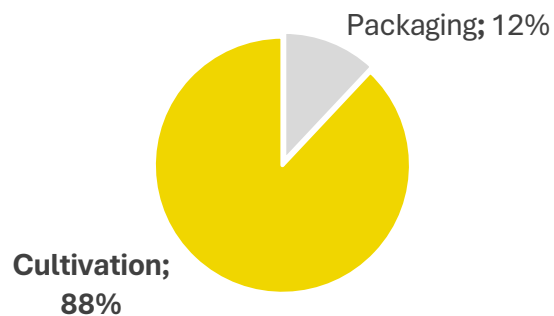
Purchase Goods (56% of total DFG)



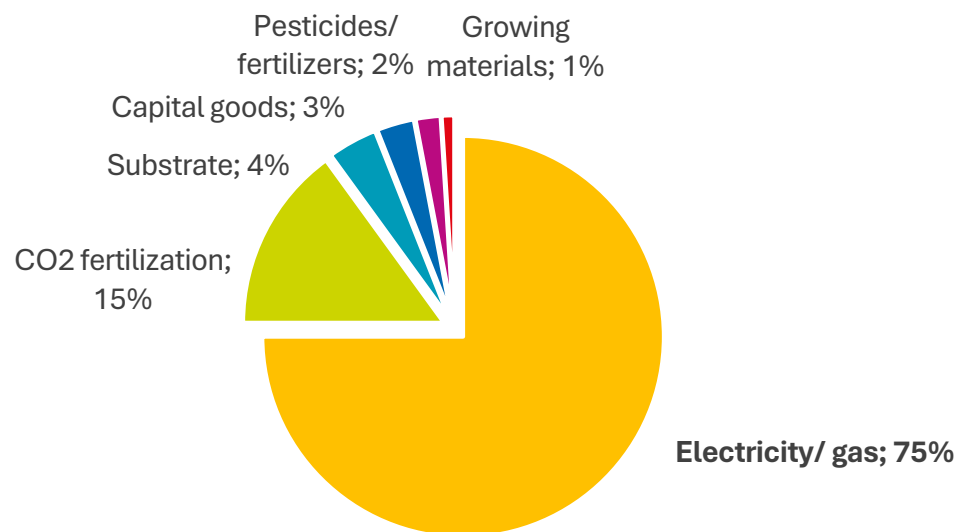
Source: Anthesis DFG SBTi results 2021 scope 3 - PG&S

Deep dive PG&S: Cultivation

Purchase Goods



Deep dive Cultivation



Strategy Cultivation; absolute reduction (-47%)

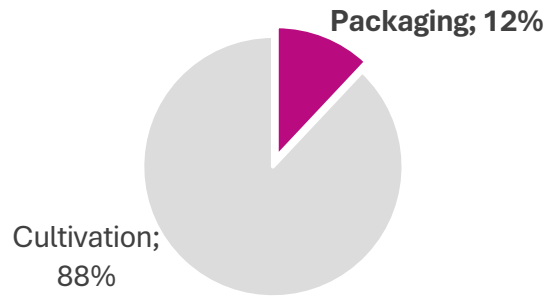
Glastuinbouw Nederland (climate neutral 2040)

- Switch to geothermic/ WKO
- Seasonal growing
- Innovation

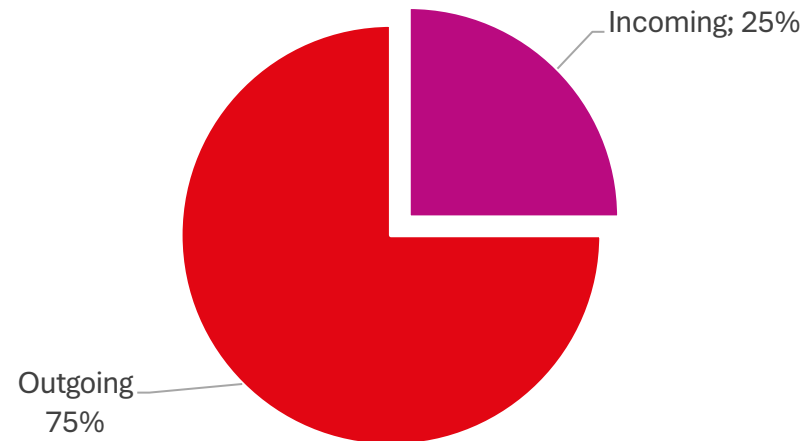
DFG encourages growers to make PEF's; in phase 1, the grower must first reduce emissions, and DFG is responsible for reporting.

Deep dive PG&S: Packaging

Purchase Goods



Deep dive Packaging



Strategy Packaging; absolute reduction (-47%)

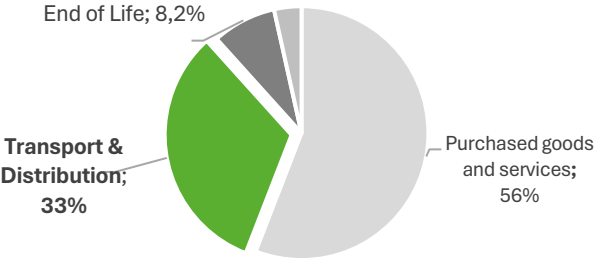
HSPI, the supplier must first reduce emissions, and DFG is responsible for reporting.

Chain approach - workshops internal (incl. managing customer requirements) e.g. material, quantity, frequency, transport

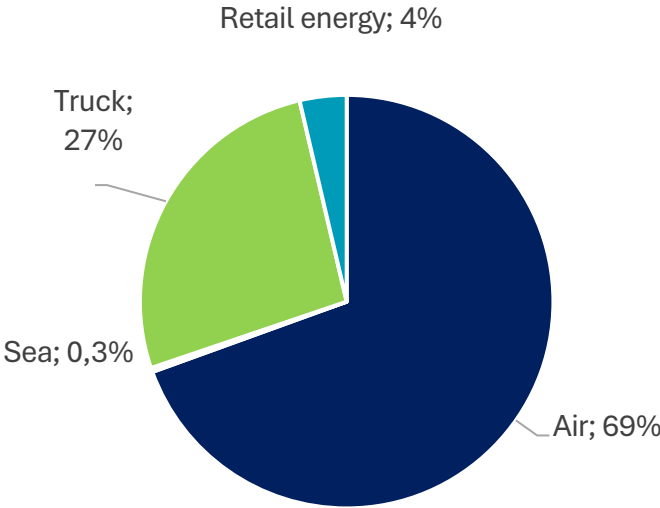
R-strategy, Rethink, Refuse, Reduce, Reuse, Recycle

Deep dive Transport & Distribution

Scope 3 DFG



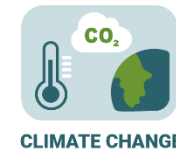
Deep dive Transport & Distribution



	Reduction strategy; divers
Air	Supplier engagement 10 airlines; >80% emissions Switch air to sea
Truck	Absolute reduction (-47%) Internal optimization Project Topsector Logistiek; increase loading factor, deliver primary data and reduce footprint Chain approach; internal workshops
Retail energy	Absolute reduction (-47%)

FloriPEFCR = improvement from bottom-up

- What is the FloriPEFCR:
Uniform, EU approved, methodology for Product Environmental Footprint Calculations, specifically for the Floriculture sector, with 16 impact categories; ends up in single score.
- Why does DFG need PEF
 - Data needed for legislation (CSRD)
 - Parameter Climate Change needed for SBTi (report & monitor reduction)
 - Learn and show potential reduction to growers
 - Our customer (mainly retail) give insight in own chain
 - Data gives opportunity for communication (sector image)



Reduction strategy - recap

Strategy Cultivation; Absolute reduction (-47%), 2031 vs. 2021	Strategy Packaging; Absolute reduction (-47%), 2031 vs. 2021	Strategy Transport; Supplier Engagement Absolute Reduction (-47%), 2031 vs. 2021	
Glastuinbouw Nederland is even more ambitious, they aim to be climate neutral by 2040. • Switch to geothermic/ WKO • Seasonal growing • Innovation DFG encourages growers to make PEF's; in phase 1, growers first reduce own footprint, and DFG is responsible for reporting.	HSPI, the supplier must first reduce own footprint, and DFG is responsible for reporting. Packaging: R-strategy: Rethink, Refuse, Reduce, Reuse, Recycle. E.g. reusable packaging is a huge system change. Chain approach - workshops internal (incl. managing customer requirements) e.g. material, quantity, frequency, transport.	Air	<i>Supplier engagement</i> 10 airlines = 80% emissions <i>Absolute reduction</i> Switch air to sea
		Truck	<i>Absolute reduction (-47%)</i> Implementation TMS DFG Project Topsector Logistiek; increase loading factor, deliver primary data and reduce footprint Chain approach; internal workshops
		Retail energy	Absolute reduction (-47%)

Implications of a SBTi commitment for our companies

Project Lead Sustainability (PLS) from DFG, with help from Sustainability Ambassadors (SA's), will contact suppliers to provide primary data regarding three hot spots: growers, packaging and transport.

- Growers: key message to all our growers is to start calculating their footprint according to FloriPEF-CR. This is already managed via a working group with the PLS and SA's.
 - Packaging: suppliers have already been approached by DFG to calculate and reduce footprint. DFG companies need to discuss internally what is within their influence to reduce—consider reusable packaging, less packaging, and recyclable materials.
 - Air Transport; the PLS will contact the DFG companies regarding their air handlers, so together we can improve the percentage of SBTi committed airlines and increase the amount of primary data.
 - Truck Transport: the PLS, together with some of our companies, on a project to gather more primary data (together with Topsector Logistiek). The PLS, together with the SA's will discuss in a working group further improvements on primary data and reduction possibilities. The transport manager(s) from our company(s) will be connected.
 - Transport – general: all companies to explore opportunities of “modal shift” (other ways of transporting: sea, train, etc.).
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Disclaimer

"Dutch Flower Group wishes to emphasize that the results presented from its SBTi process represent an interpretation only. Although these outcomes are based on calculations utilizing primary supplier data, supplemented by secondary data sources (FloriPEFCR), these calculations are still in development and, as such, do not accurately represent the detailed supply chains of our companies and stakeholders. Consequently, no rights can be derived from the information provided in this presentation."





Dutch
Flower
Group

*Working towards a more
sustainable world, together*



Questions?

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#withoutsustainabilitythereisnofuture