



Sustainability in industries

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Business Development in Automation & Digitalization,
for Grain Milling Solution Business





Innovations for a better world.



Digitalization and automatization



Integrated value chains



Improve the asset base



Schools and training centers



6:30 a.m.

7:15 a.m.

10:00 a.m.

3:00 p.m.

7:00 p.m.

Bühler is part of the everyday life of billions of people

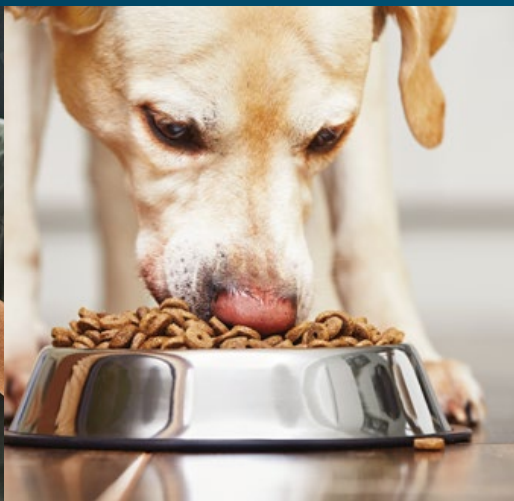
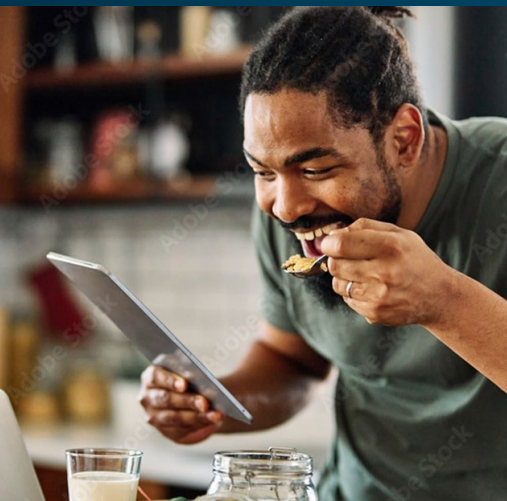
7:00 a.m.

7:30 a.m.

12:00 p.m.

6:00 p.m.

8:00 p.m.



Innovations for a better world – our normative framework

Balancing the needs of humanity, nature, and economy

Nature

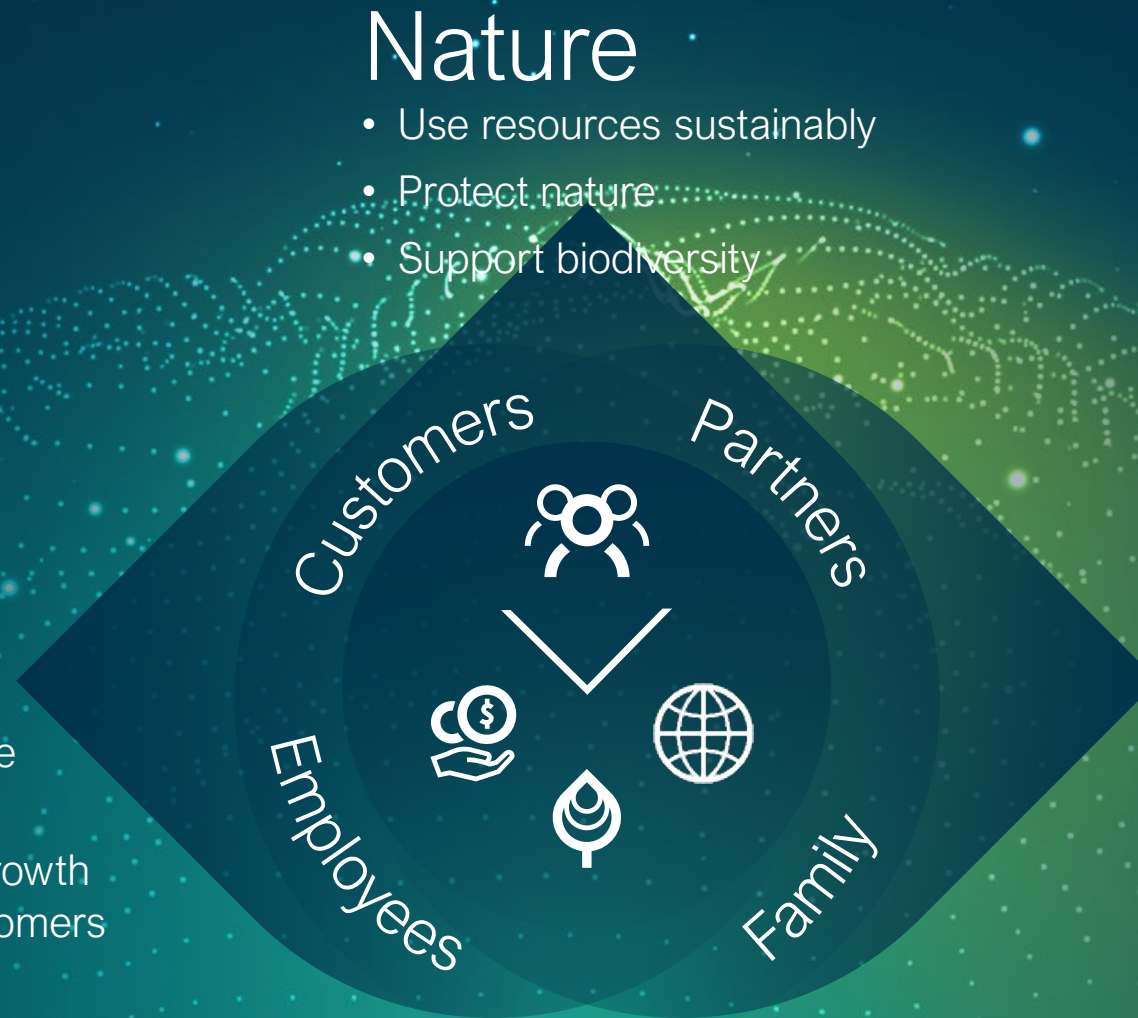
- Use resources sustainably
- Protect nature
- Support biodiversity

Economy

- Sustainable profitable growth
- Enabling business growth of partners and customers

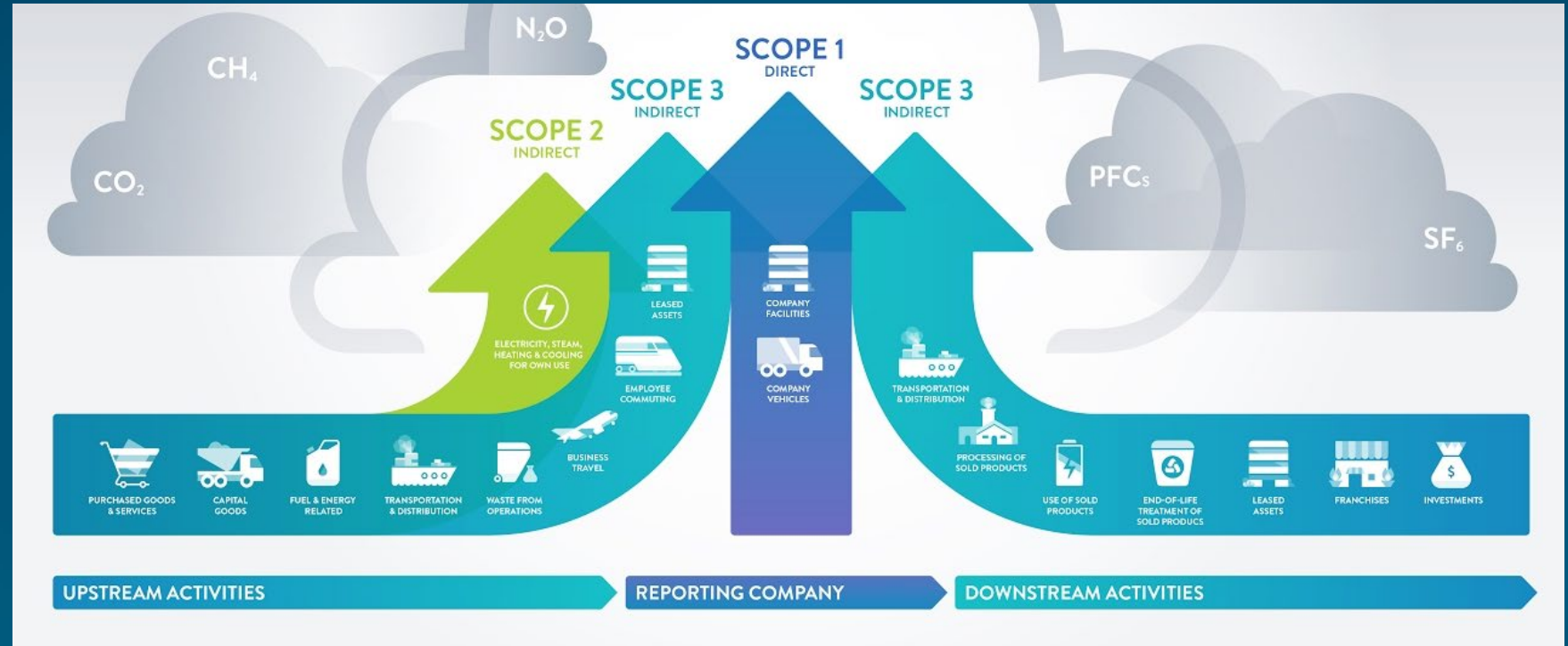
Humanity

- Affordable nutrition
- Sustainable mobility and living
- Education and job creation
- DE&I across value chain



Two main concepts of CO2e calculation

GHG Protocol /
ISO 14064:
Company emissions
per year
CO2e only

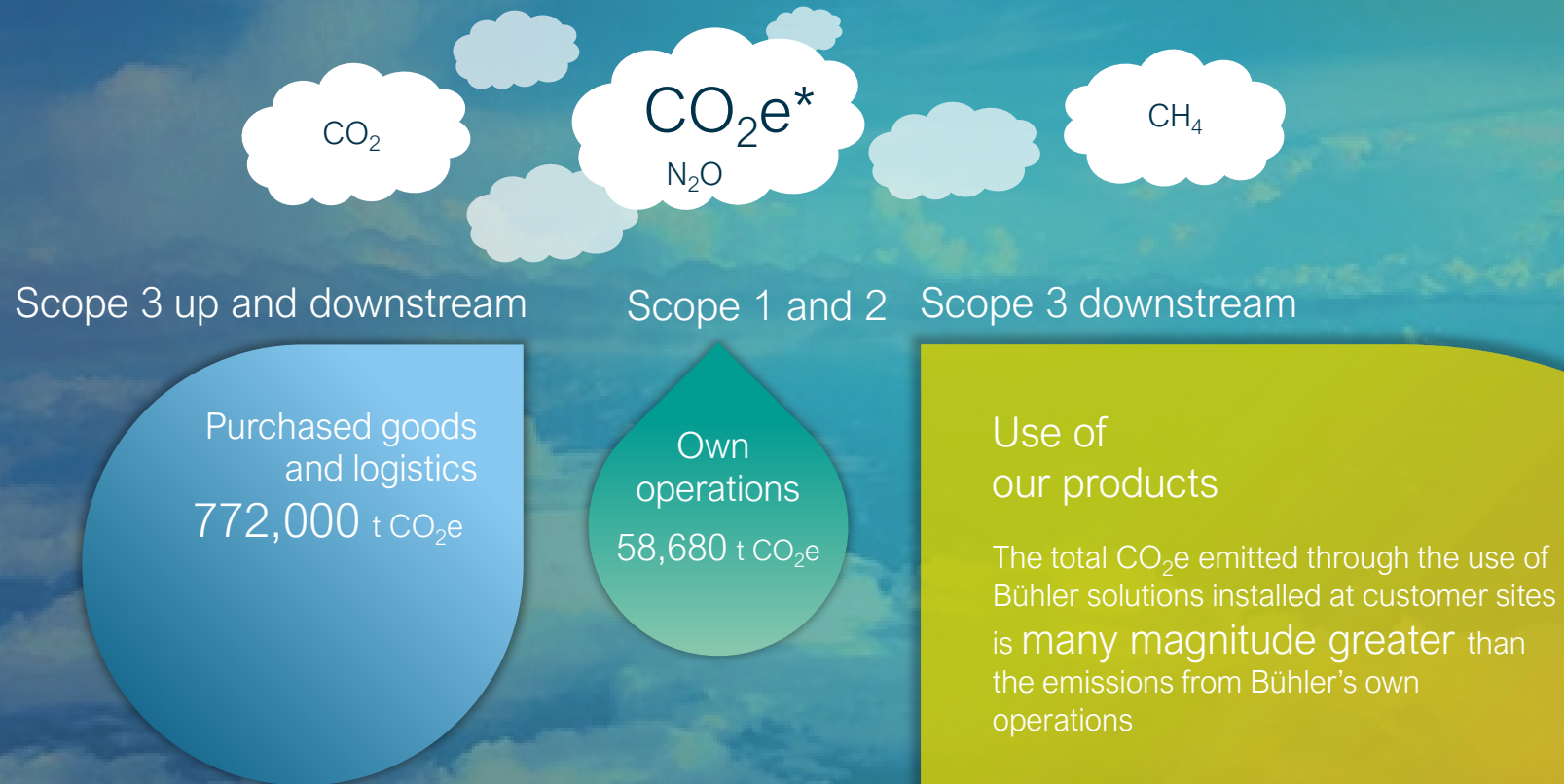


LCA/
ISO 14067:
Product emissions
over the life cycle
other metrics than CO2e
also possible



Bühler's CO₂e footprint

The biggest impact comes from **supporting our customers** to achieve their climate goals



* CO₂e quantification following Greenhouse Gas Protocol (GHP) with 2019 as baseline

Our sustainability commitments in nature

Focus on Customers



We support our customers to measure and reduce greenhouse gas emissions following science-based targets.

-50%

We will have solutions ready to multiply by 2025 that reduce energy, waste, and water by 50% in our customers' value chains.

Focus on Bühler

-60%

We have developed a pathway to achieve a 60% reduction of greenhouse gas emissions in our operations by 2030.

(Greenhouse Gas Protocol Scope 1 & 2, 2019 baseline)



We proactively collaborate with suppliers to reduce climate impacts throughout the value chain.

Focus on Partnerships



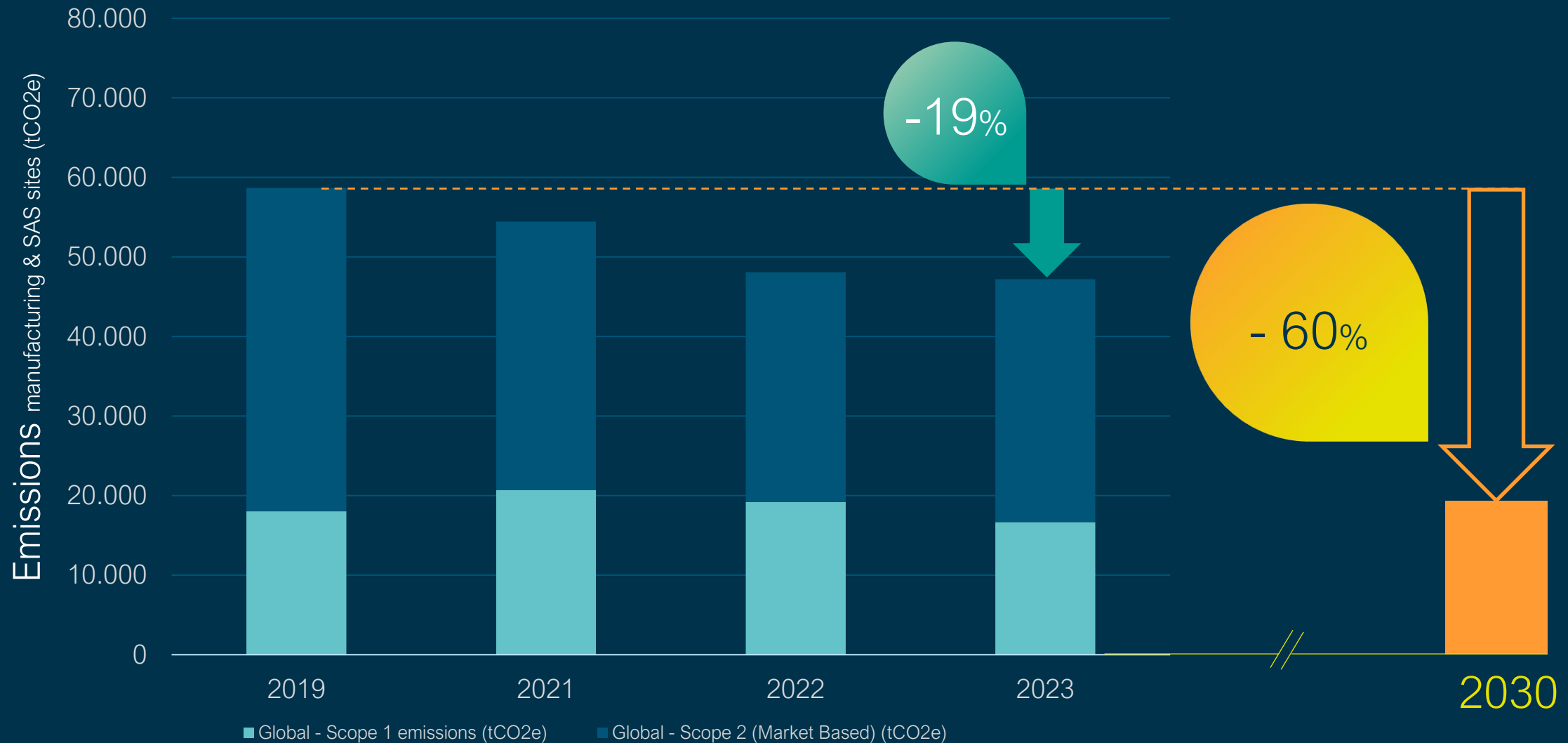
We protect and restore biodiversity.



Progress toward our 60% target
Scopes 1 and 2

We are on track to reach our 60% reduction target by 2030

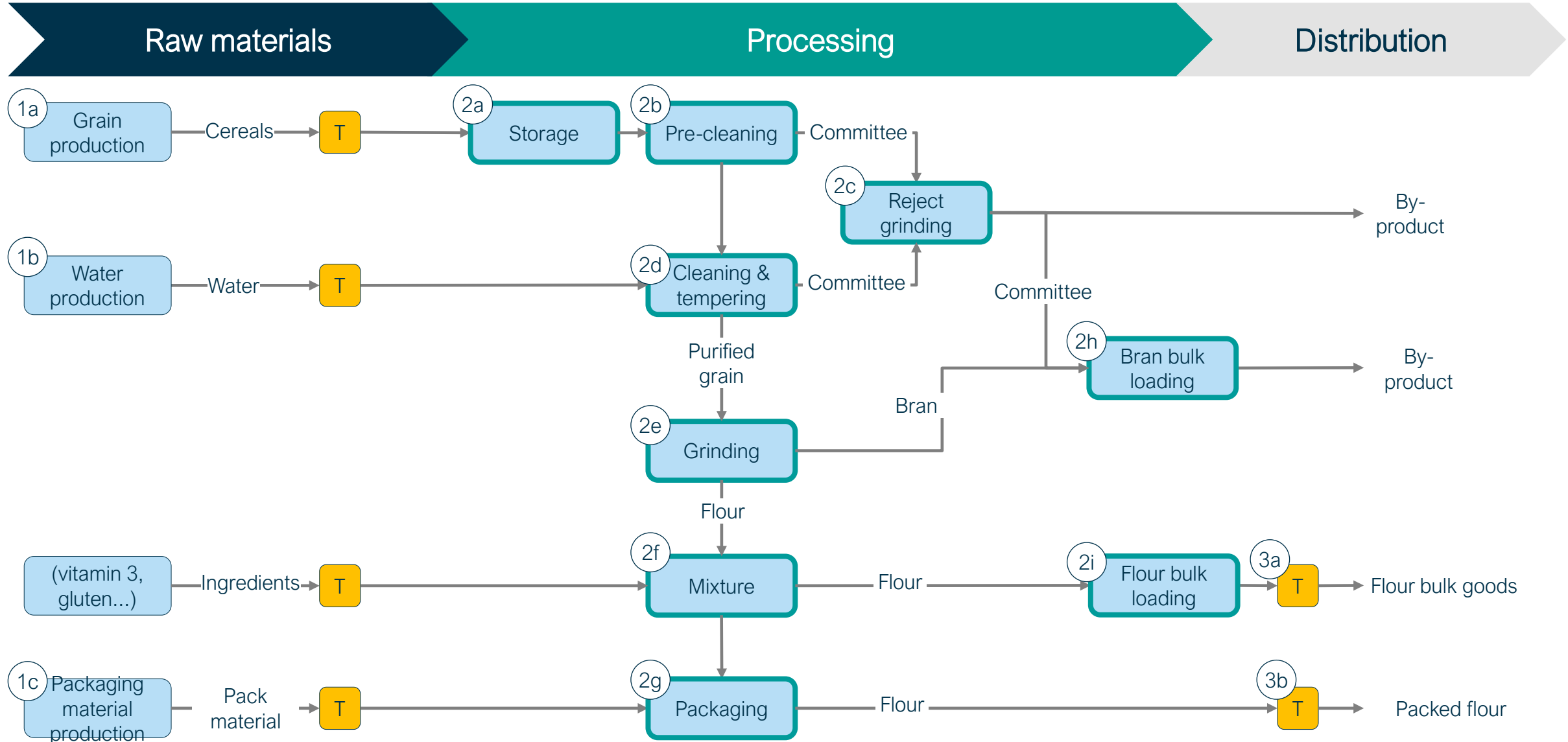
19% reduction already achieved by 2023 (market based, 2019 baseline)



Progress toward our 50 50 50 goal
Scope 3 downstream (use of sold goods)




Process flow diagram for wheat flour production



We focus on innovations for sustainability

We quantified the sustainability impact of over 70 technologies and services




Arrius –
The integrated grinding system

- 7 AFFORDABLE AND CLEAN ENERGY
- 9 INDUSTRY, INNOVATION AND INFRASTRUCTURE
- 12 RESPONSIBLE CONSUMPTION AND PRODUCTION



Sortex H –
Precision sorting with less waste

- 2 ZERO HUNGER
- 9 INDUSTRY, INNOVATION AND INFRASTRUCTURE
- 12 RESPONSIBLE CONSUMPTION AND PRODUCTION



Servo drive in die casting
of metal parts

- 7 AFFORDABLE AND CLEAN ENERGY
- 9 INDUSTRY, INNOVATION AND INFRASTRUCTURE
- 12 RESPONSIBLE CONSUMPTION AND PRODUCTION

-10%
Energy

-205¹
t/year
CO₂e

Through yield increase
Circular
economy

-50%²
Waste

-649¹
t/year
CO₂e

-40%³
Energy

-510⁴
t/year
CO₂e



CO₂e emissions



Water depletion



Agricultural land use



Circularity



SDGs

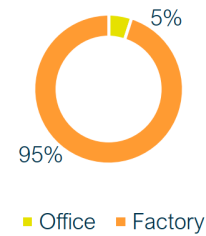
¹ Based on a throughput of 135,000 tons per year | ² More raw material production through reduction of false rejects in sorting process |
³ In the Carat 400 Die Casting cell | ⁴ Based on throughput of 4,000 tons

With our Environmental Impact Services, we support our customers to measure and reduce their GHG emissions and product footprint

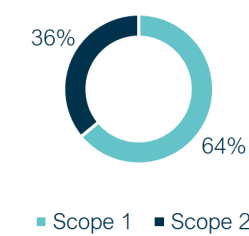
Key benefits

-  Measure environmental footprint
GHG and product life cycle assessment
-  Report and communicate
With 3rd party certifications
-  Reduce footprint
Leveraging Bühler value services

Site breakdown

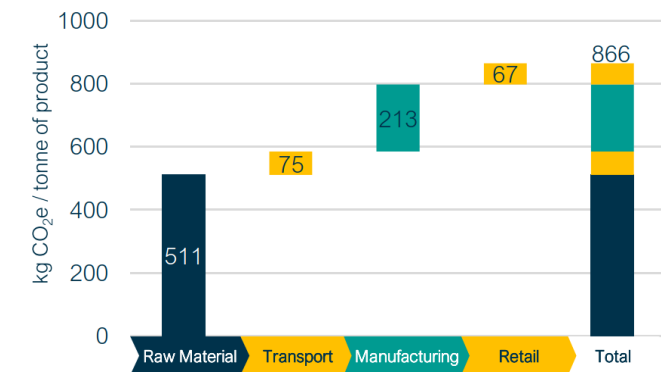


Scope breakdown



Total emissions per site: 3,890 ton CO₂e/year

Product footprint



Examples of our Environmental Impact Services



Energy assessment



Digital services



Retrofits



Electrification / new

BUHLER

INNOVATIONS FOR A BETTER WORLD

Owner Commitment & Strategy



Sustainability Department



Sustainability Community



Sustainability Ambassadors

Sustainability organized at Bühler



Targets



Trainings

CHF 365.- <small>Engagement: 2'000 CHF/Jahr</small>	ABO 2. KLASSE	CHF 1'365.- <small>Engagement: 4'000 CHF/Jahr</small>	ABO 1. KLASSE
	ZonenABO		ZonenABO
	+		+
	Halbtax		Halbtax
	+		+
	400 Franken Flex-Credits		Upgrade 1. Klasse

Mobility concept



Lunch

How to start?



1. Proper maintenance



2. Measure and display



3. Retrofit



INNOVATIONS FOR A BETTER WORLD