

Investors Presentation

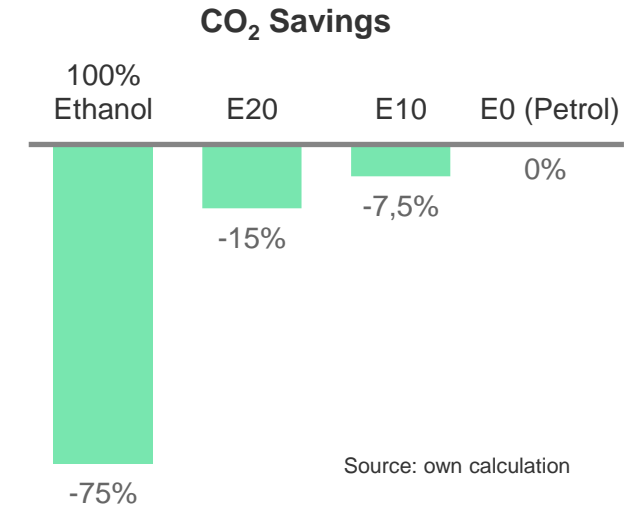
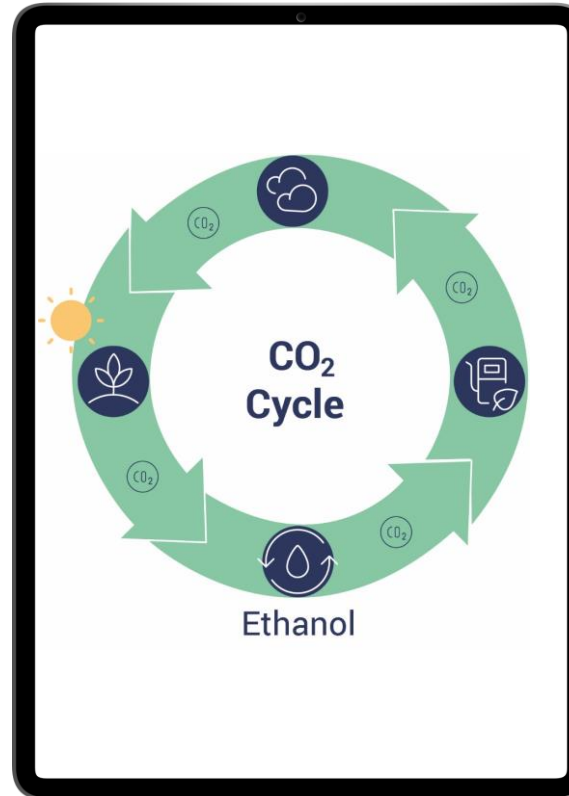
November 2023

Dr Stephan Meeder, CEO/CFO
Heike Baumbach, Head of Investor Relations

Renewable ethanol

Climate protection in the transport sector

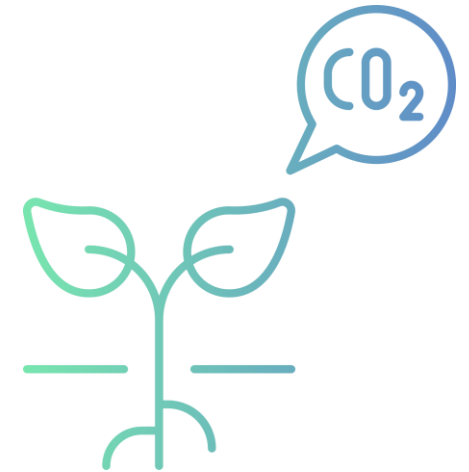
- Produced from domestic, renewable raw materials
- Helps fossil carbons stay in the ground permanently and stops driving climate change
- Less greenhouse gases, nitrogen oxides & particulate matter compared to fossil fuel
- Road transport causes around 20% of greenhouse gases in Europe
- European ethanol saves on average > 75% of greenhouse gases compared to petrol



Ethanol

>75% less GHG emissions compared to fossil fuels*

- The GHG values of all elements in the value-added chain are added up
- The emissions from ethanol when used in combustion engines is zero
- European ethanol reduces annual GHG emissions by >10 Mt**



*94.0 gCO₂eq/MJ **Own calculations

Range of products

Renewable ethanol



As an additive to **petrol** to improve the greenhouse gas balance



As **neutral alcohol** for food and beverages



As **neutral alcohol** for the processing industry: cosmetics, pharmaceuticals, disinfection, technical applications



As a **basis material** for the chemical industry



High-quality, renewable **ethanol** (alcohol)

Food and animal feed

From ethanol production



Vital Wheat Gluten
Valuable protein product for food and animal feed industry



ProtiGrain®/ Ensus-DDGS
High protein animal feed from dried stillage

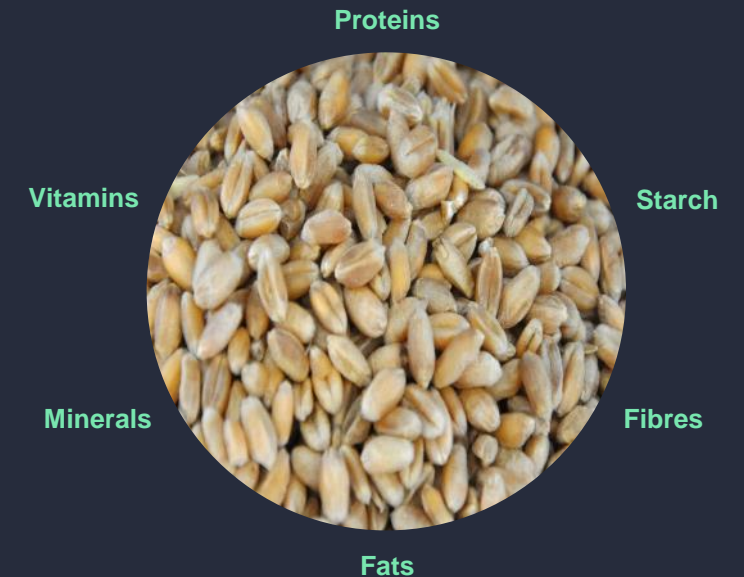


ProtiWanze® – CDS
Liquid protein animal feed from stillage



Food-quality, liquefied CO₂
For food and beverages industries

All raw material components are processed into **high-quality products**

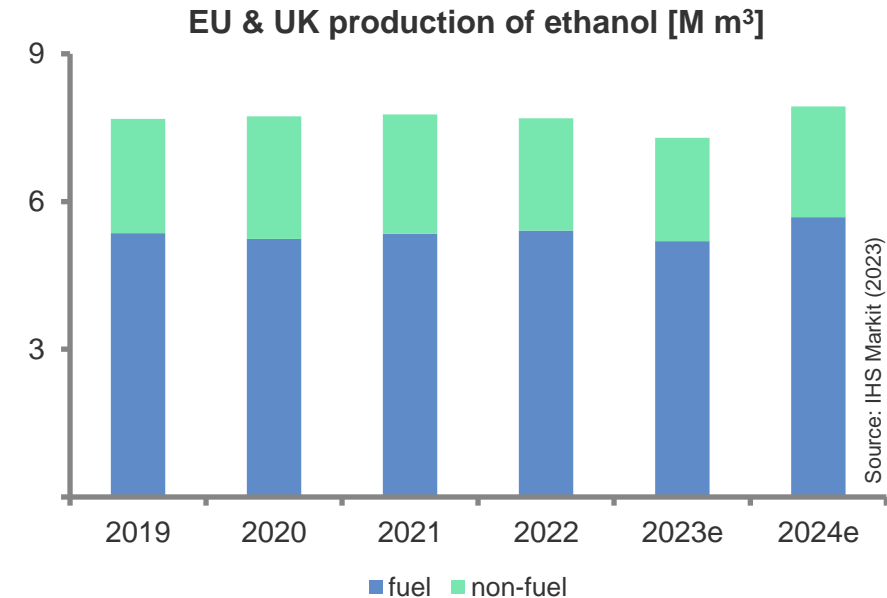
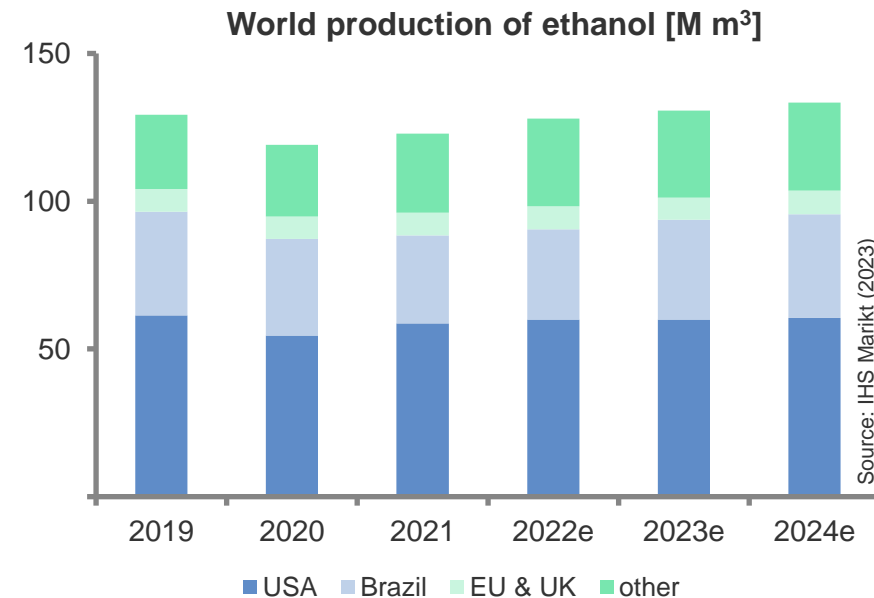


The ethanol markets

Production

- World production
 - 2023e: 129 million m³ (+3%)
 - Fuel applications: 110 million m³ (+4%)
 - 2024e: 132 million m³ (+2%)
 - Fuel applications: 113 million m³ (+3%)

- EU & UK production
 - 2023e: 7.3 million m³ (-5%)
 - Fuel applications: 5.2 million m³ (-4%)
 - 2024e: 7.9 million m³ (+9%)
 - Fuel applications: 5.7 million m³ (+9%)

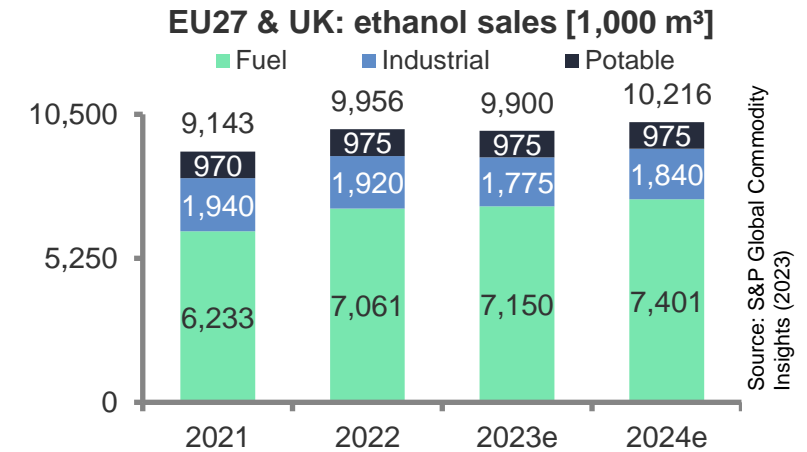


Market development

Volumes

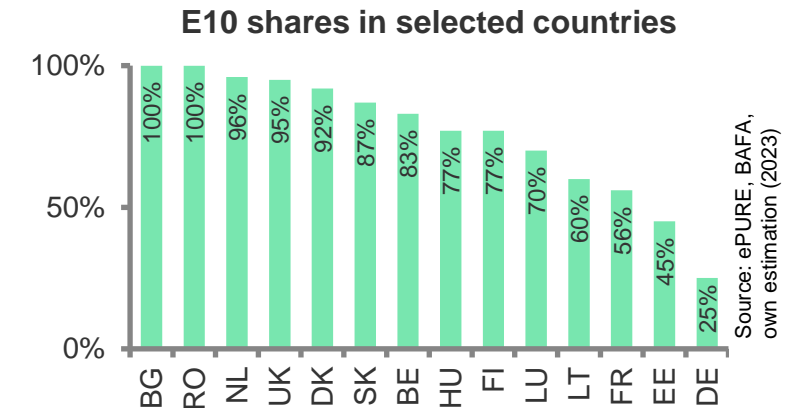
Ethanol market in the EU27 & UK in 2023 (in million m³)

- Consumption: 9.9 -1% (7.2 fuel | 2.8 non-fuel)
- Production: 7.3 -5% (5.2 fuel | 2.1 non-fuel)
- Fuel ethanol sales expected to increase further in 2024
- Non-fuel ethanol sales expected to decrease slightly in 2023



E10 no. 1 petrol in many European countries

- Currently, 17 EU member states plus Norway and the UK have rolled out E10 at petrol stations
- E10 sales in Germany also increasing
- Start of E10 sale in Ireland, Austria and Norway in April 2023
- Introduction in Poland planned at beginning of 2024



Market development

Imports and prices

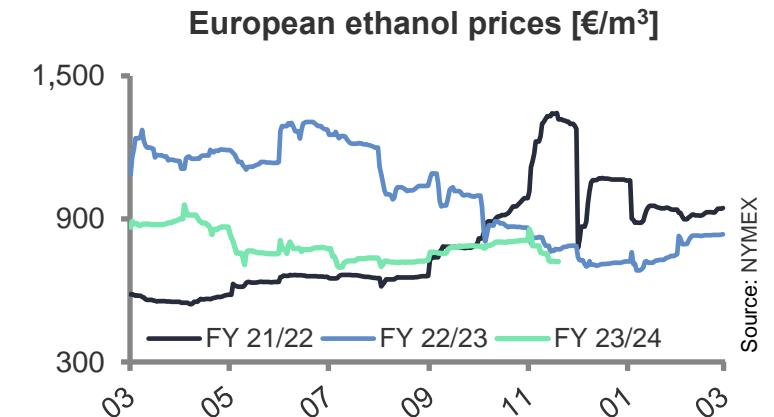
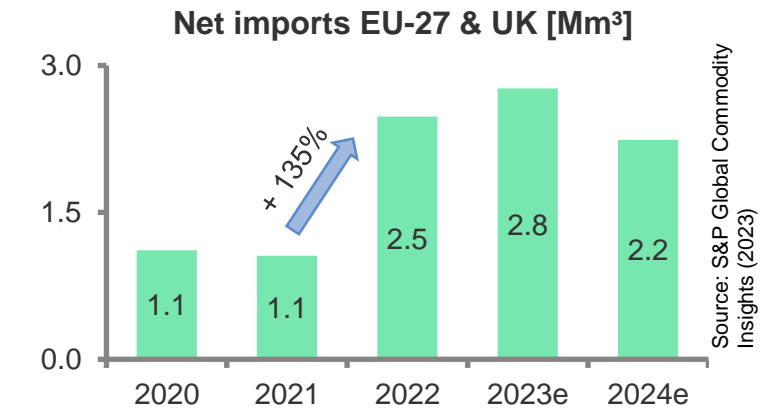
Imports expected to remain at high level in 2023

- Large price difference made imports to Europe attractive
- Price gap has decreased in recent months
- Europe needs imports to cover rising demand, but level playing field needed

European ethanol price* in 2023

- Average ethanol price in Q2 2023/24 € 746 (1,171) /m³
- Sharp price decrease since beginning of November
- Closed arbitrage over the last months making imports less attractive

* Ethanol T2 FOB Rdam, next date of expiry



Market development

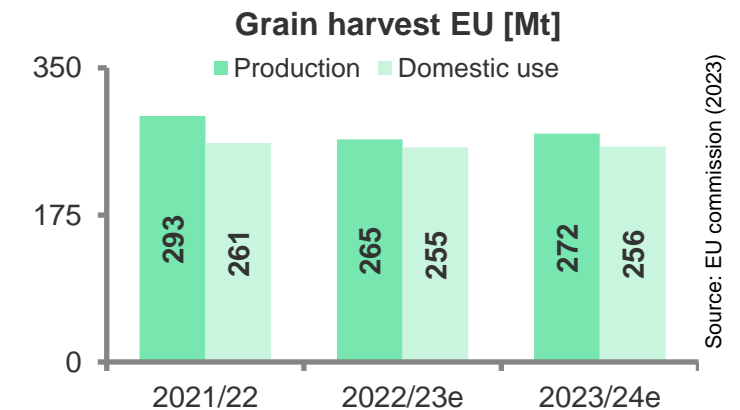
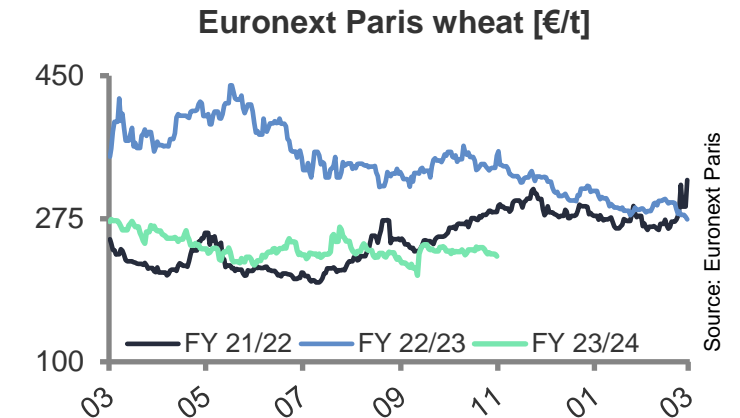
Feedstock market

Grain market 2023/24

- Grain prices in Q2 2023/24*: € 232 (350) /t
- EU grain harvest: 272 (265) Mt exceeds consumption of 256 (255) Mt
- Imports to EU are expected to stay on a high level after sharp increase in grain year 2022/23
- IGC expects rise of global grain harvest with 2,295 (2,266) Mt
- Large harvest and export volumes from Ukraine to EU pushing prices below € 230 /t

* Wheat (Euronext Paris), next date of expiry

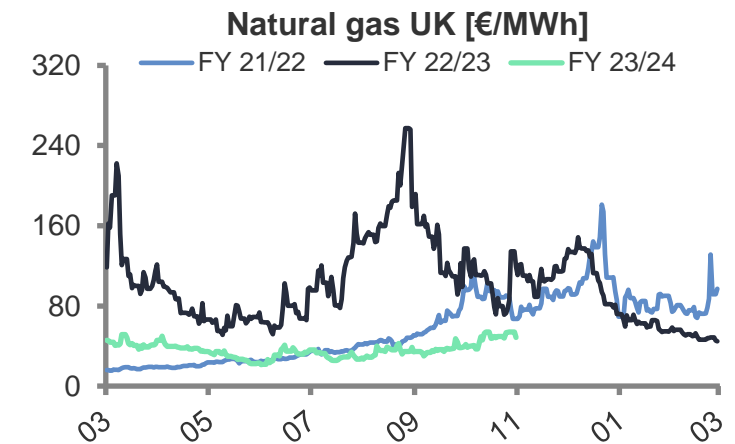
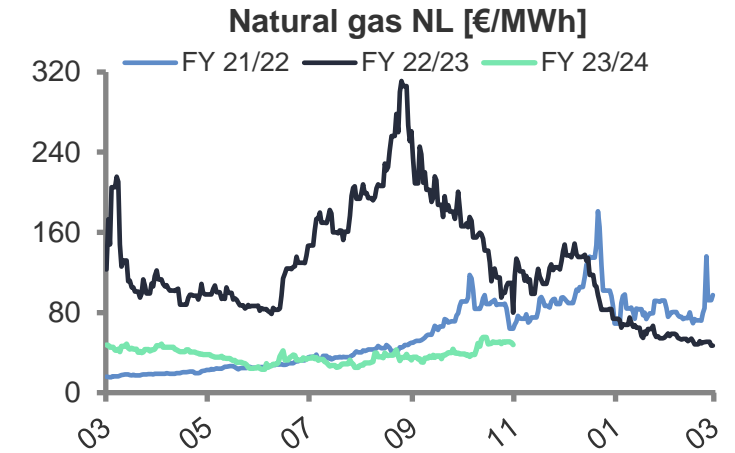
November 2023



Market development

Energy markets

- Spot and forward prices show increased volatilities
- Gas markets show a strong contango situation in forward curve
- Temperatures in the coming winter are expected to drop to normal levels
- Norwegian import flows reached normal levels after several maintenances
- Strikes at an Australian LNG export terminals in Australia have been finally resolved
- Tamar gas field in the Mediterranean Sea, which has stopped operations due to Hamas-Israel conflict, resumes operations



Fit-for-55 package and RED-III

Overall goal to reduce greenhouse gas (GHG) emissions by 55% in 2030

Renewable Energy Directive (RED-III)

- Increase of overall share of renewable energy to 42.5% (vs. 32%)
- Transport sector: 29% by energy or 14.5% of GHG savings by 2030
 - Crop-cap (unchanged): share in 2020 plus 1% (max. 7%)
 - Sub-target of 5.5% for advanced biofuels and synthetic fuels

Emission Trading System (ETS)

- More ambitious GHG reduction goal of 62% (vs. 43%)
- Separate ETS for buildings, road transport and fuels

ReFuelEU aviation and Fuel EU maritime

- Sustainable aviation fuels of 6% in 2030 increasing to 70% until 2050
- GHG savings in maritime fuels of 6% in 2030 increasing to 80% by 2050

CO₂ standards for new cars and vans

- Increased CO₂ emission targets of -55% in 2030 and -100% in 2035
- Violation of technology neutrality despite loophole for synthetic fuels



Is Europe waking up to the importance of ethanol?

Several signs of more realism and pragmatism instead of stubborn ideology (I)

European policymakers start to recognize what their counterparts around the world already know:

Renewable ethanol offers strategic advantages for energy independence, food security, and the fight against climate change

- **20 May 2023:** EU leaders co-signed a G7 declaration asserting that sustainable biofuels have a vital role to play in transport decarbonization
- **19 June 2023:** European Court of Auditors report calling into question the current EU strategy of betting everything on electric vehicles as the way to decarbonize road transport – and phasing out all other options



Is Europe waking up to the importance of ethanol?

Several signs of more realism and pragmatism instead of stubborn ideology (II)

- **15 Sep 2023:** EU Commission introduces surveillance measures on imports of renewable ethanol for fuel
 - Decision allows a close three-year monitoring of imports into the Union
 - Imports of ethanol for all uses to the EU increased by more than 80% between 2021 and 2022
 - Surveillance is a first step to collect information and monitor the evolution of imports
 - EU renewable ethanol industry stands ready to act to prevent further injury to preserve its sector and jobs
- **21 Sep 2023:** UK government postpones the date for the ban on the sale of new cars with internal combustion engines from 2030 to 2035



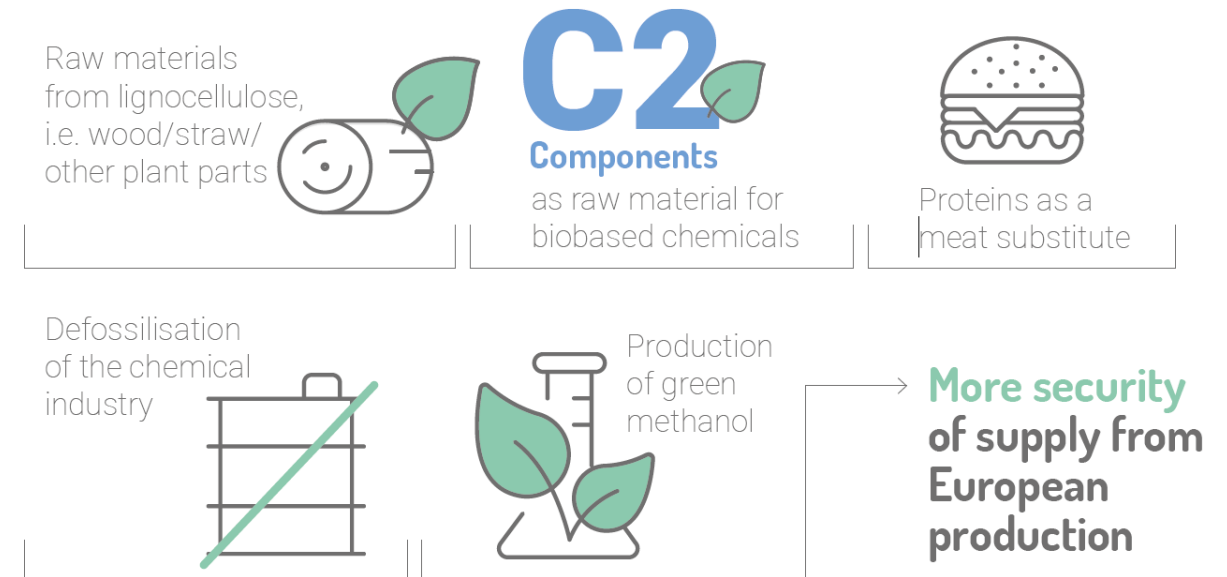
Innovation from Biomass

For our future:

Sustainability and climate neutrality

- Core business of mobility – with sustainable and climate-friendly fuels
- New business area – based on ethanol derivatives as an alternative to fossil raw materials
- Biogenic CO₂ as the raw material of the future and for the company's further development
- Protein products for the food and feed industry serve growth market and deepen value creation
- New business area for green electricity and green hydrogen

New product and production concepts



Acquisition of EthaTec GmbH

Expansion of production of advanced ethanol planned

- Asset deal was signed on 17 November 2023
- “Closing” in coming months
- Purchase price of ~ € 8 million
- EthaTec produces advanced ethanol from food industry waste, such as dough residues from bakeries and pizza factories
 - Production capacity of up to 3 million litres of advanced ethanol and biogas
 - Optimised energy concept with biogas production, no fossil energy
- CropEnergies plans to optimise the site and expand production capacity over the next few years
- Production technology can be set up at other locations and expanded on a decentralised basis
- EU-target for advanced biofuels and RFNBOs in RED III at 5.5 % by 2030

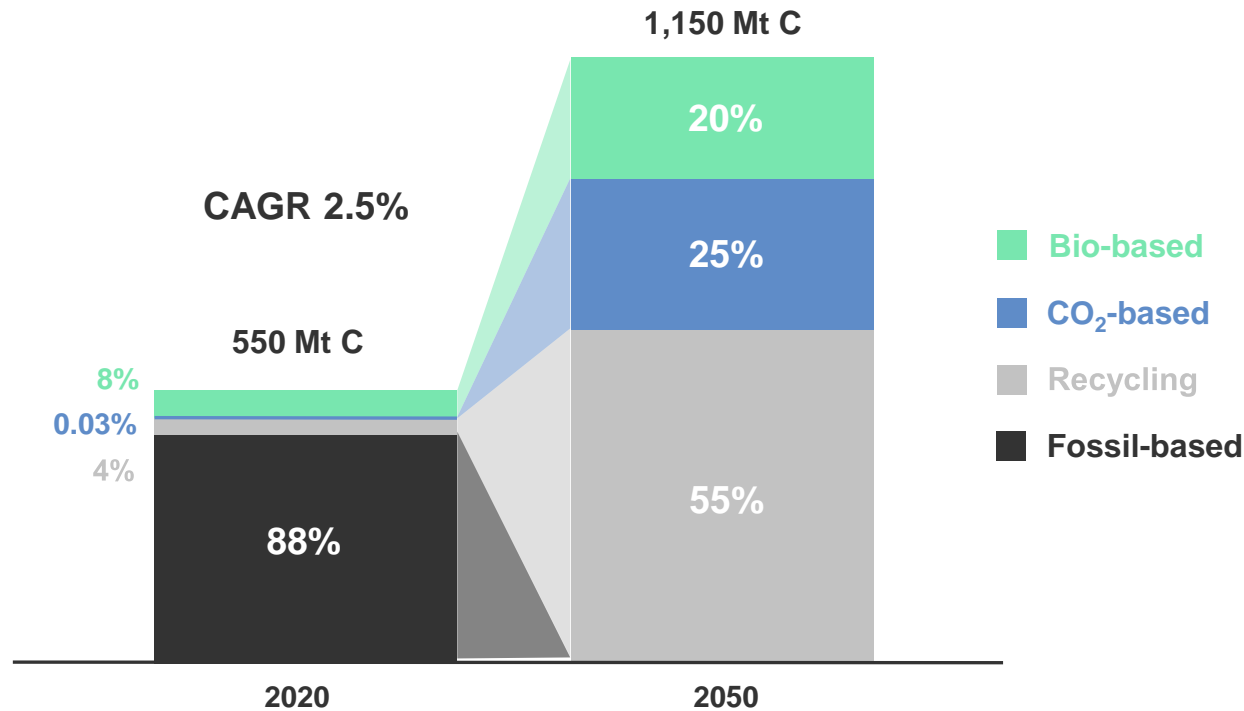


Biobased Chemicals (BBC)

Green carbons: growth opportunity for CropEnergies

Global demand for carbon for chemicals increases

(million tonnes of embedded carbon)

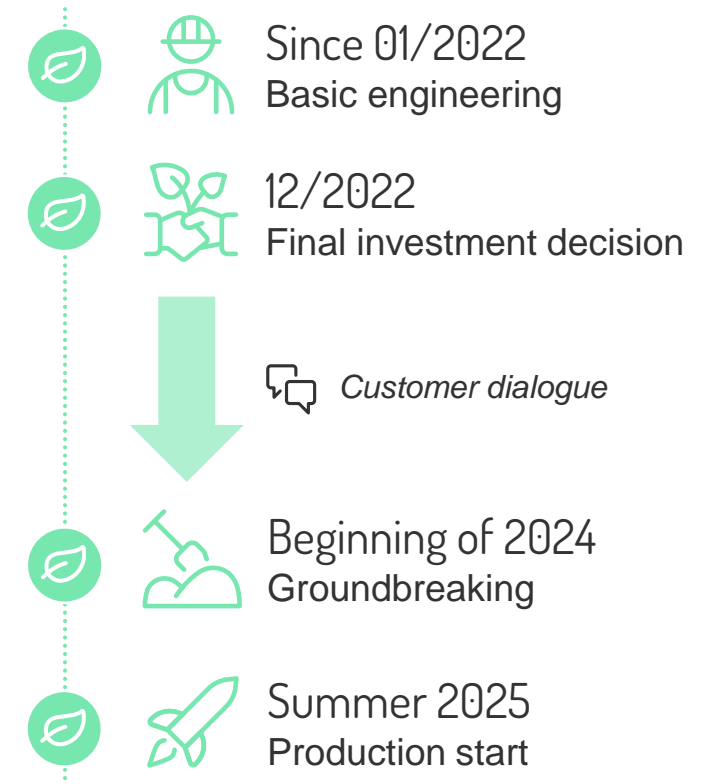


Source: Kähler, F., Porc, O. and Carus, M. 2023. RCI Carbon Flows Report: Compilation of supply and demand of fossil and renewable carbon on a global and European level. Editor: Renewable Carbon Initiative, May 2023. Available at: www.renewable-carbon-initiative.com

Project ZETAC

€ 120-130 million investment in renewable ethyl acetate

- Construction of the first of its kind production facility in Europe based on Johnson Matthey technology
 - Production of 50,000 t ethyl acetate with a valuable hydrogen by-product stream directly from ethanol
 - Location: Zeitz Chemical and Industrial Park
- Ethyl acetate is widely used in the manufacture of cosmetics, flexible packaging and coatings, paints and adhesives, as well as in the food, beverage and pharmaceutical industries



Renewable Ethylen

A further step towards Biobased Chemicals (BBC)

Acquisition of 50% in the Dutch start-up Syclus BV

- Objective: construction and operation of a first of its kind ethanol-to-ethylene facility at the Chemelot industrial park in Geleen, Netherlands
 - Annual production capacity approx. 100,000 t
 - Technical and economic feasibility until end of FY 2023/24
 - Investment requirement in the range of € 120-130 million
- Renewable ethylene – alternative to oil and gas
 - European demand for (fossil) ethylene approx. 20 million tonnes per year
 - Main building block for plastics and polymers, e. g. packaging, building materials, automotive applications, paints, adhesives, fibers, clothing and many more everyday products

SYCLUS



Chemelot industrial park

Protein Concentrate “EnPro”

Total investment of ~ € 100 million at Ensus plant

- New product will be marketed under the brand name EnPro
- High-protein product aimed at UK and European aquafeed and pet food markets
 - Protein content around 55-60%
 - GMO free and sustainable
- Capacity of 60,000 tons planned
- Total investment for “EnPro” approximately € 75 million
- Diversification of overall product portfolio
- Commissioning scheduled for 2025
- Further investments of ~ € 25 million planned to improve plant reliability and reduce CO₂ emissions of Ensus’ production site



CropEnergies acquires stake in LXP Group



Next step in strategic realignment

CropEnergies secured approx. 20% of the biotech startup

Access to innovative technology for 2nd generation feedstocks

- Patented process – mild digestion of cellulosic and hemicellulosic biomass like forest and wood residues or straw for advanced biofuels and biobased chemicals
- In addition, high-purity, natural lignin – for e.g., 3D printer ink, carbon fibers or phenolic resins
- Technology can also be integrated into existing biorefineries
- LXP Group GmbH plans to build a pilot plant using 15,000 t of biomass in 2024/2025



LXP GROUP

Financials

1st half 2023/24



Overview 2nd quarter 2023/24

• Ethanol production	243.1 (302.4) ,000 m ³	- 20%
• Revenues	€ 309.2 (449.8) million	- 31%
• EBITDA	€ 31.0 (103.1) million	- € 72.1 million
• Operating profit	€ 20.0 (92.5) million	- € 72.5 million
• Net income	€ 16.5 (70.9) million	- € 54.4 million
• Net financial assets (vs. 28.02.2023)	€ 273.4 (318.1) million	- € 43.8 million
• Financial result	€ 1.9 (0.8) million	+ € 1.1 million

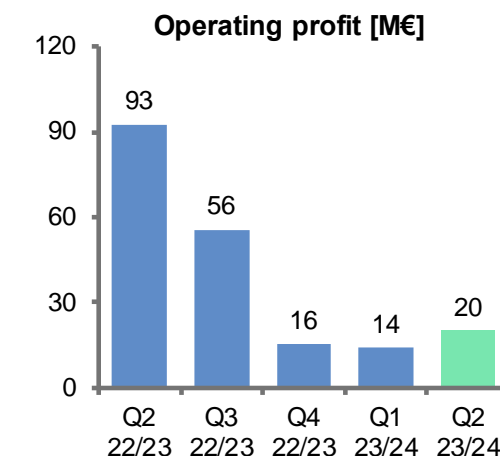
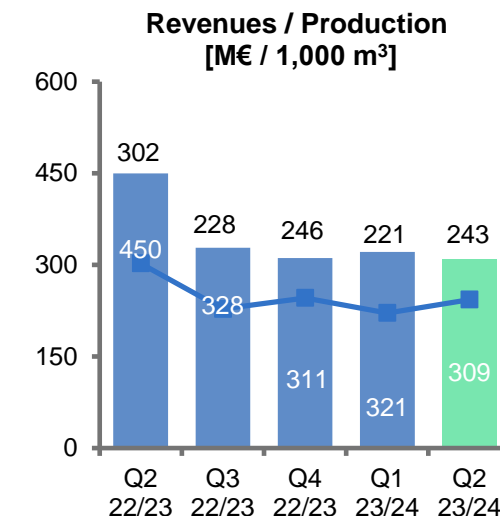
Note: Figures in parentheses relate to the corresponding prior-year period.

Operating profit 2nd quarter 2023/24

(in € million)	Q2 2023/24	Q2 2022/23	Δ
Revenues	309.2	449.8	- 31%
Overall performance	310.9	451.9	- 31%
Cost of materials*	-252.4	-319.9	+ 21%
Spread (gross)	58.5	132.1	- 56%
<i>in % of overall performance</i>	18.8%	29.2%	-
Further operating expenses/income*	-27.5	-28.9	+ 5%
EBITDA*	31.0	103.1	- 70%
Depreciation*	-10.9	-10.6	- 3%
Operating profit	20.0	92.5	- 78%
<i>Margin</i>	6.5%	20.6%	-

*without restructuring costs and special items

- Significantly lower sales prices for ethanol and lower production volume
- Prices for raw materials below level of previous period



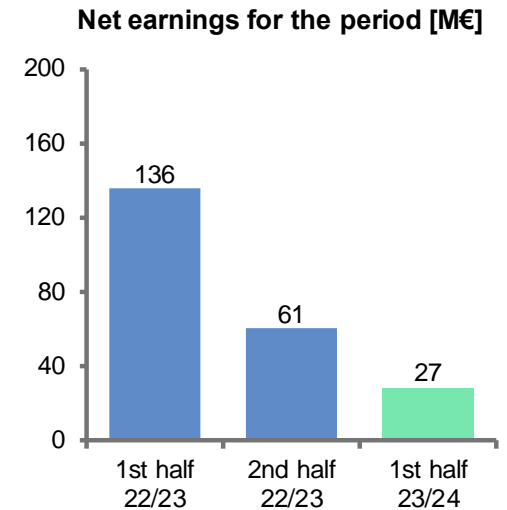
Overview 1st half 2023/24

• Ethanol production	464.4 (583) ,000 m ³	- 20%
• Revenues	€ 630.6 (848.7) million	- 26%
• EBITDA	€ 56.1 (200.9) million	- € 145 million
• Operating profit	€ 34.2 (179.7) million	- € 146 million
• Net earnings	€ 27.5 (135.8) million	+ € 108 million
• Net financial assets (vs. 28/02/2023)	€ 273.4 (318.1) million	- € 44 million
• Financial result	€ 3.2 (1.2) million	+ € 2 million

Note: Figures in parentheses relate to the corresponding prior-year period

Net earnings

(in € million)	6 M 2023/24	6 M 2022/23	Δ
Operating profit	34.2	179.7	- 81%
Restructuring costs / special items	-0.4	0.0	-
At-equity result	0.1	0.1	- 26%
Income from operations	33.9	179.8	- 81%
Financial result	3.2	1.2	> + 100 %
Earnings before income taxes	37.1	181.0	- 80%
Taxes on income	-9.6	-45.3	+ 79%
Net earnings for the period	27.5	135.8	- 80%

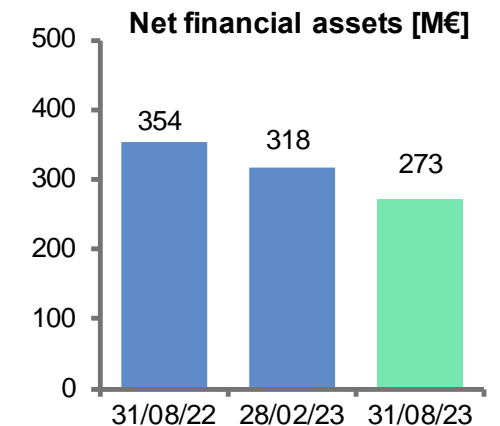
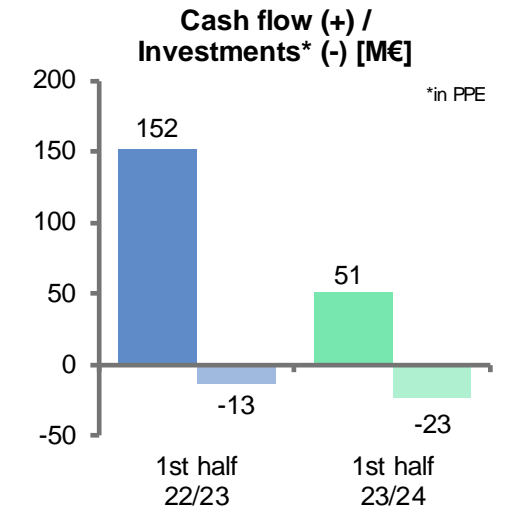


- Significant increase in interest income due to rising interest rates
- EPS at € 0.31 (1.56) follows earnings development

Cash flow

(in € million)	6 M 2023/24	6 M 2022/23	Δ
Cash flow	51.2	152.4	- 101.2
Change in net working capital	-17.2	26.3	- 43.5
Net cash flow from operating activities	34.0	178.7	- 144.7
Investments in property, plant et al.	-22.5	-12.5	- 10.0
Investments in financial assets	-1.2	-1.1	- 0.1
Increase / decrease in financial receivables	205.0	-120.2	+ 325.2
Payments into current financial investments	-114.6	-5.0	- 109.6
Cash flow from investing activities	66.7	-138.8	+ 205.5
Cash flow from financing activities	-55.2	-42.1	- 13.1
Changes in exchange rates / consolidation basis	0.1	-0.2	+ 0.3
Change in cash and cash equivalents	45.6	-2.4	+ 48.0
	31/08/2023	31/08/2022	Δ
Net financial assets	273.4	354.0	- 80.6

- Further investments for renewable ethyl acetate plant
- Significant increase of payments into financial investments



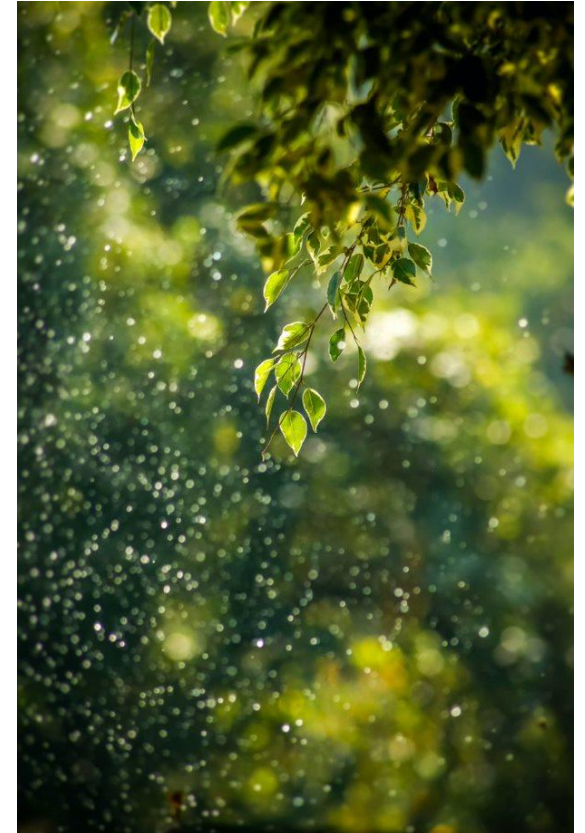
Outlook 2023/24 adjusted on 15/11/2023

Ethanol prices much weaker than expected

- Revenues between € 1.24 to € 1.30 (previous year: € 1.49) billion
- EBITDA in a range of € 115 to € 145 (previous year: € 294) million
- Operating profit between € 70 to € 100 (previous year: € 251) million

Assumptions

- Increased volatility on the sales, commodity and energy markets, particularly in the previous year due to the war in Ukraine, could increase again as a result of the recent escalation in the Middle East
- Uncertainties in the implementation of regulatory framework conditions
- Introduction of E10 in other European countries continues to point to stable sales of fuel ethanol, although this will continue to be offset by high import volumes.



Sustainability

A large, stylized leaf graphic composed of two overlapping curved lines, positioned on the right side of the slide. The leaf is oriented diagonally, with its tip pointing towards the top right corner. The background of the slide is a gradient from light green on the left to blue on the right.

CropEnergies climate targets - we are on track



Targets

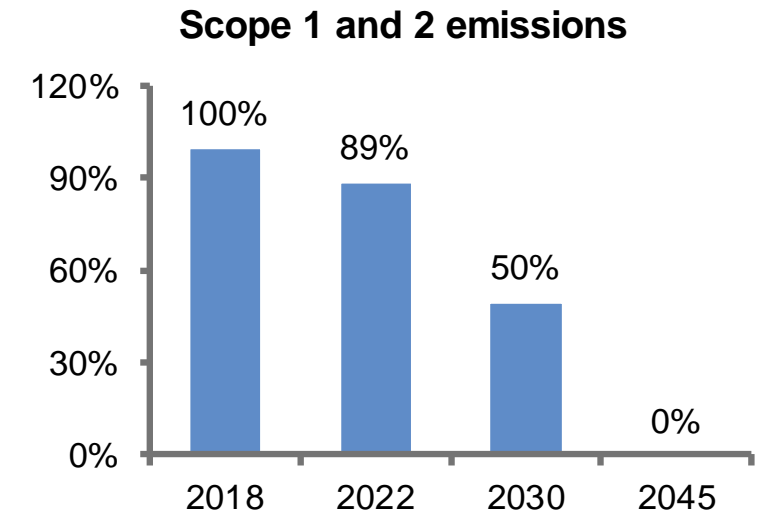
- Reduction of fossil CO₂ scope1 & 2: - 50% by 2030
- Intermediate target of - 24% by 2026
- Climate neutral by 2045 or before

Measures

- Usage of waste heat
- Improve energy efficiency
- Electrification of processes (e.g. heat pumps, vapor recompression)
- Fuel switch

Südzucker Group SBTi-commitment

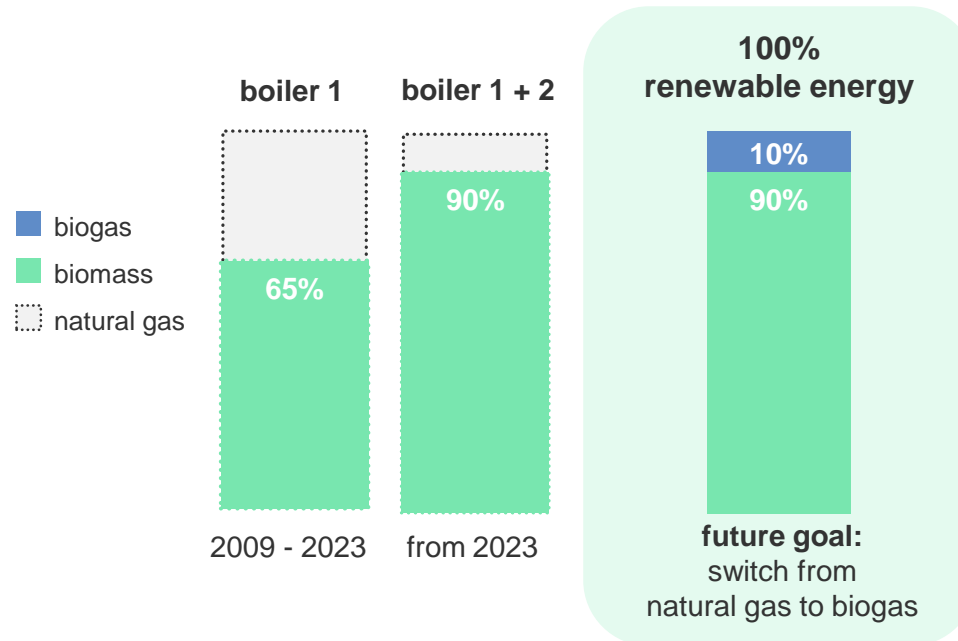
- - 30% scope 3 emissions by 2030



* Science Based Targets initiative

Our first plant on the way to a fossil free production process

- Second biomass boiler in test phase – fully operational in late 2023
- 50,000 t CO₂ reduction per year



New biomass boiler

Sustainability initiatives and external ratings

Recent achievements

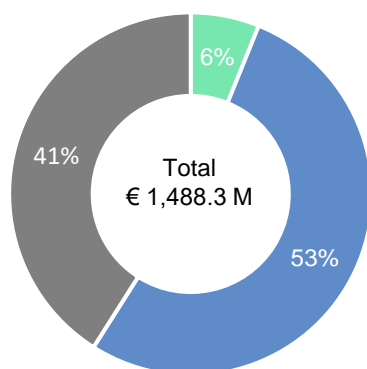
- CE underlined it's strong commitment to global sustainability goals by joining several voluntary initiatives in 2022/23
- CE increases transparency through participation in ratings and disclosure projects
- CE is aiming to increase its engagement in sustainability platforms



EU-Taxonomy

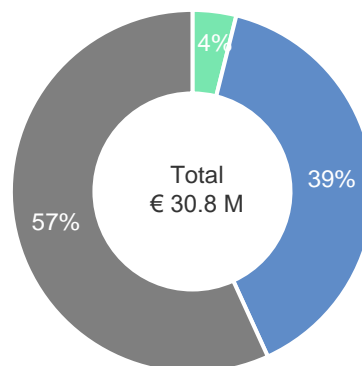
FY 2022/23: first-time reporting of taxonomy aligned figures

Turnover



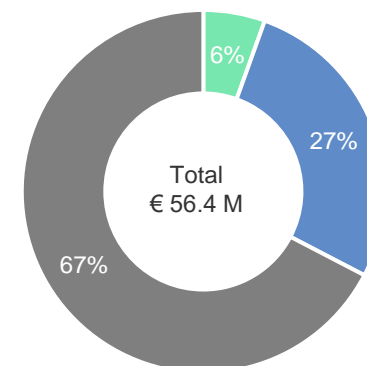
Taxonomy-aligned	€ 91.0 M
Taxonomy-eligible	€ 787.1 M
other	€ 610.2 M

Opex



Taxonomy-aligned	€ 1.2 M
Taxonomy-eligible	€ 12.1 M
other	€ 17.5 M

Capex



Taxonomy-aligned	€ 3.1 M
Taxonomy-eligible	€ 15.3 M
other	€ 38.0 M

- Taxonomy-**eligible** sales mainly from the production of fuel ethanol from agricultural raw materials under environmental objective “climate change mitigation”
- Only sales from the production of **residue-based ethanol** are taxonomy-aligned

Appendix



Overview



Listed in the Prime Standard
(Frankfurt Stock Exchange)
since 2006

495 Employees
(Feb. 2023)

Financial Year 2022/23:

Revenues: **€ 1,488 million**

Operating Profit: **€ 251 million**

EBITDA: **€ 294 million**

Member of Südzucker Group

Majority shareholder: **69%**

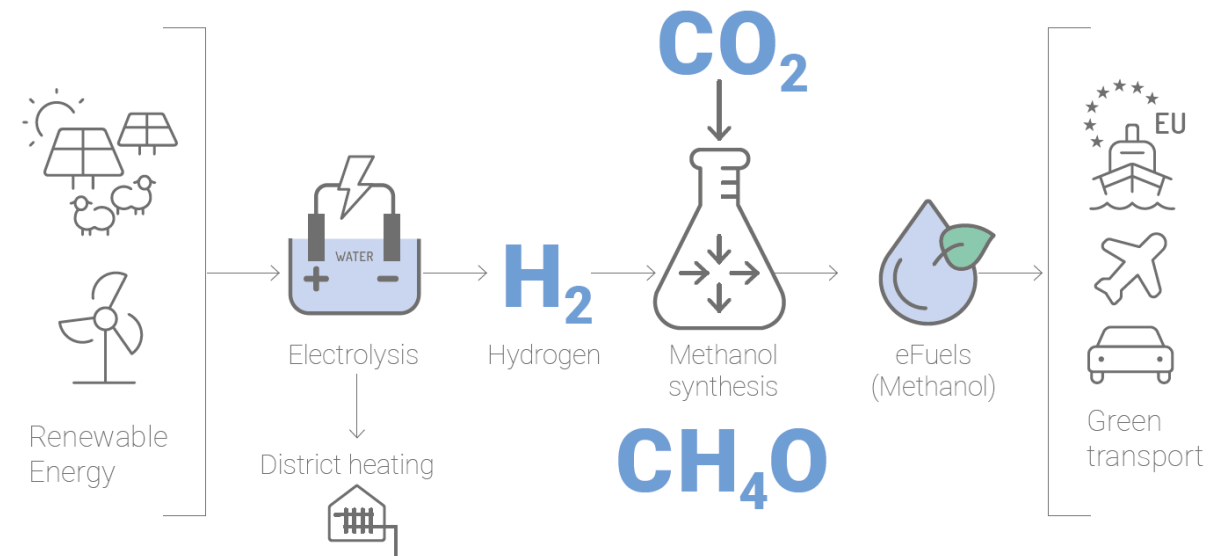
Participation in East Energy

Energy transition requires green electricity

- In September 2022, CropEnergies acquired a 25% stake in East Energy
- East Energy plans the construction of several large photovoltaic parks in North-Eastern Germany
- Production of green hydrogen from self-generated electricity envisaged
- Production of methanol as fuel for ships and aviation under investigation



eFuels from solar and wind energy



Current political framework – RED* II

14% renewable energy in transport sector by 2030

Arable crops



- 2020 level, max. 7%
- Local, sustainable
- Proteins
- **Commitment to 1G as reliable basis for low-emission transport sector necessary**

Annex IX-A



- Min. 0.2% in 2022
- Min. 1.0 % in 2025
- At least 3.5% in 2030
- Strong market potential
- Very capital intense
- **Investment security and investment incentives decisive**

Annex IX-B



- Max. 1.7%, but still x2 versus today
- UCO imports: 10x within last 10 years
- **Compatibility with law on waste needs to be ensured**

Electricity



- Important component in the future
- But: discretionary multiplier (x4) does not save a single gram of CO₂
- **Extension only reasonable if additional green electricity will be produced**

* Renewable Energy Directive

Super E20 for Europe

Higher biofuel blends needed to reach climate targets

Super E20: a step to climate neutrality

- Special requirements for E20 are now discussed in the German standardization DIN circle
- A future E20-standard would also help to increase the possibilities for renewable fuels (E20+)

Example Four Motors

- ✓ The special racing fuel was developed in cooperation between Shell and CropEnergies
- ✓ New fuel (2023): 60% renewable components, of which 20% ethanol, only 40% fossil fuel: ca. 40% CO₂ reduction and almost 103 octane

Super E20 at public petrol station

- ✓ First fuel pump for E20 in Mannheim, to be tested on defined fleets
- ✓ Objective: proof of easy implementation in existing infrastructure

Position

Standardization of E20-fuel

Petrol with 15% to 20% (v/v) ethanol



© Four Motors

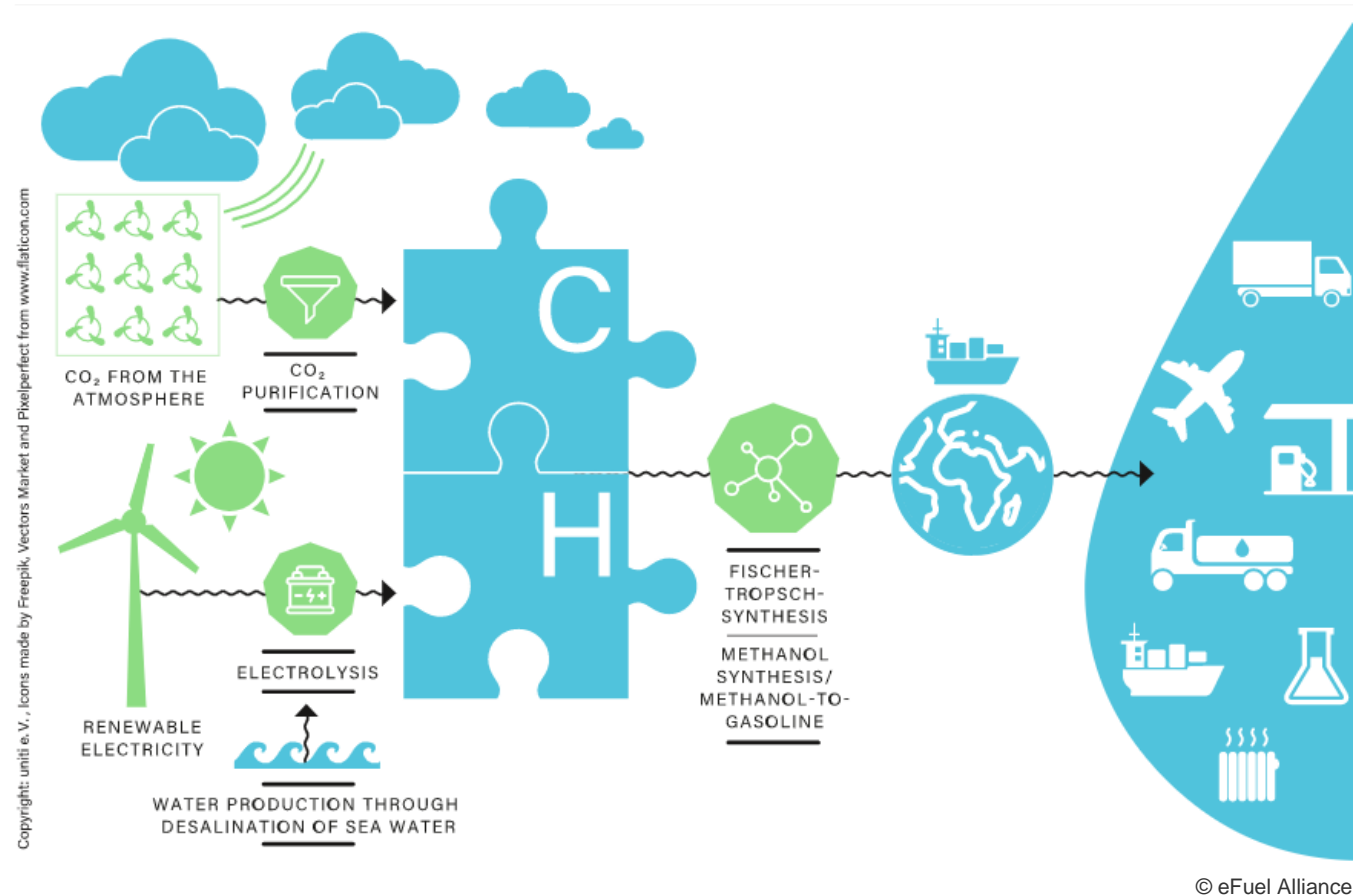
Ethanol & eFuels – the perfect match

Ethanol as “octane booster”

eFuels need ethanol to increase performance










eFuels

- Manufactured using captured carbon dioxide together with hydrogen obtained from sustainable electricity sources such as wind and solar
- Climate-friendly but energy intense
- Ethanol is the perfect match to upgrade eFuels: high octane number, available and economically viable



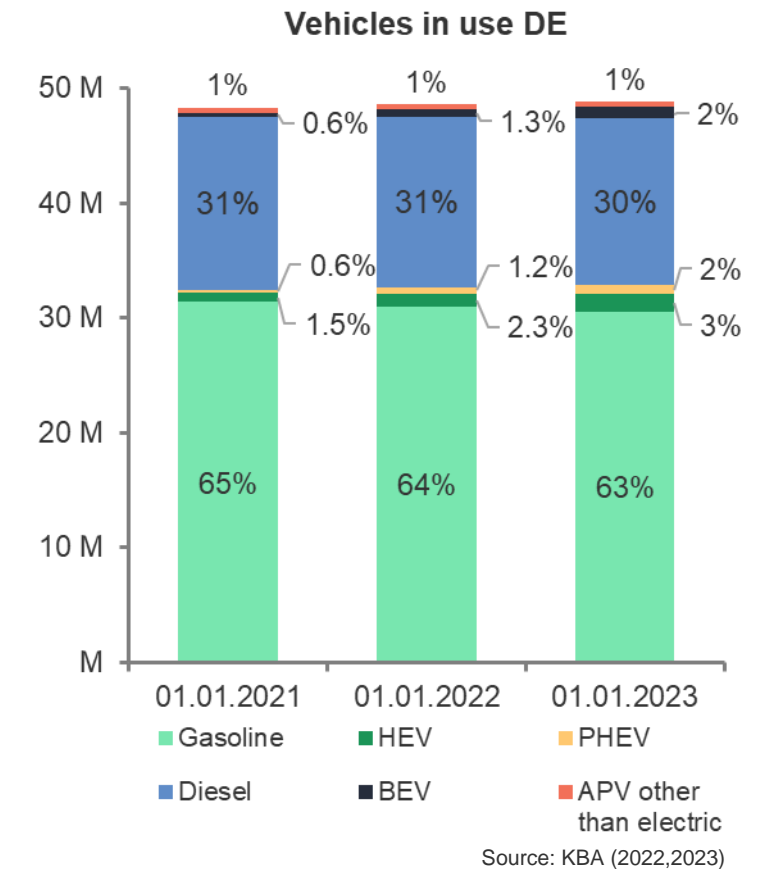
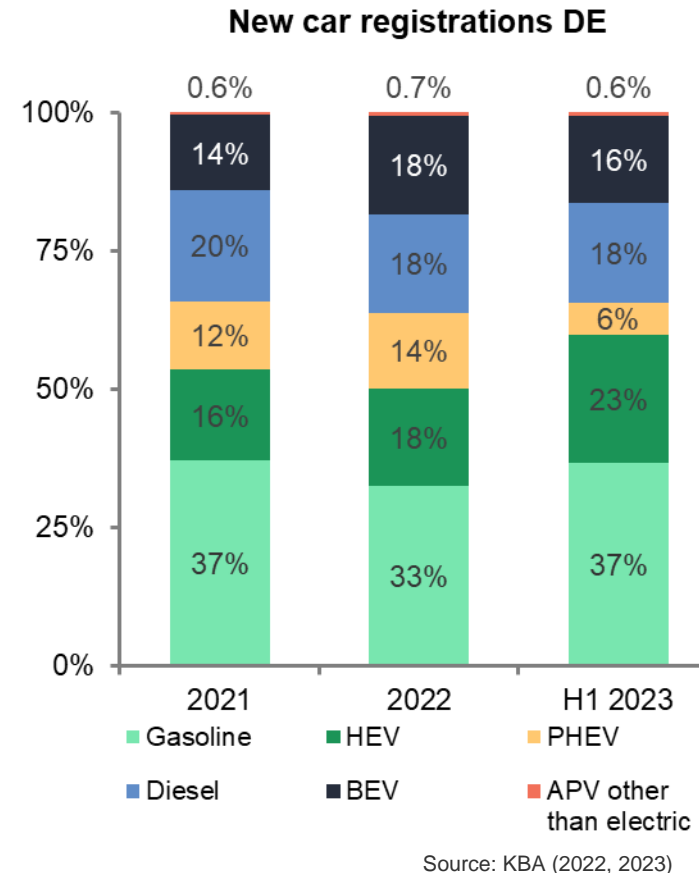
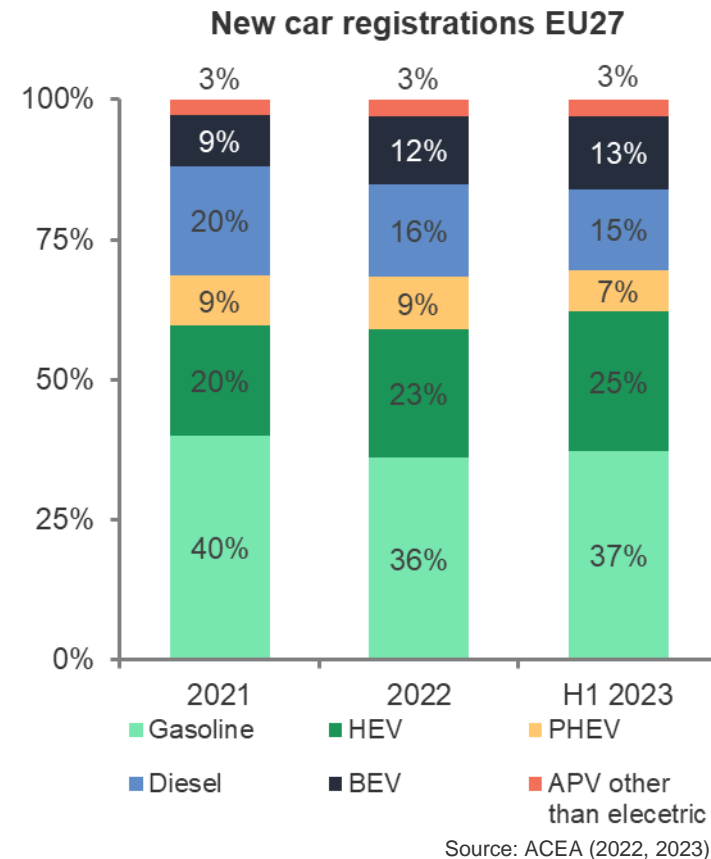
Revision “Renewable Energy Directive”

Provisional agreement between Council and Parliament on 30 March 2023

								
OVERALL BINDING TARGET BY 2030 (ART 3)	TRANSPORT TARGET (ART 25)	ADVANCED & RFNBOS (ART 25)	CROP-CAP & ANNEX IX-B	CALCULATION FOR RE IN TRANSPORT (ART 27)	ECCR (ANNEX V-C)	WASTE HIERARCHY AND CASCADING PRINCIPLE (ART 3)	CULTIVATION EMISSIONS OF WASTE & RESIDUES	NUTS 2 CULTIVATION VALUES (ANNEX V-C)
42.5% + Endeavour to increase to 45% (but not mandatory)	<ul style="list-style-type: none"> 14,5 % GHG intensity reduction or 29% RES consumption 	<ul style="list-style-type: none"> 5.5% of RE supplied to the transport sector. As part of this target, 1% must be RFNBO by 2030. MS are encouraged to set differentiated targets at national level 	<ul style="list-style-type: none"> 2020 share in transport +1% with 7% limit per MS Annex IX-B: limited to 1.7%; MS may modify that limit subject to approval by EC 	<ul style="list-style-type: none"> Annex IX & RFNBOS: x2 RE electricity: x4 to road & x1,5 to rail 	The possibility for biorefineries to claim CCR credits is maintained, however, only until 31 December 2035.	<ul style="list-style-type: none"> MS shall take into account the waste hierarchy. Derogation allowed to ensure security of energy supply No direct financial support for the use of saw logs, veneer logs, industrial grade roundwood, stumps and roots to produce energy. 	All wastes and residues to be considered zero-emission up to their point of collection, regardless if they are included in Annex IX and fit for use in the food or feed market, as in RED II.	Possibility for operators to use NUTS2 values is maintained

Climate-friendly liquid fuels will be essential

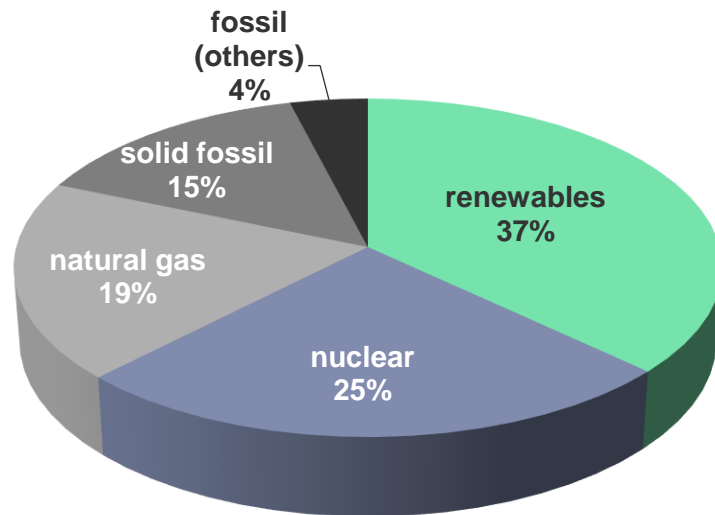
Development of car registrations and vehicles in use



Gross electricity generation in the EU27

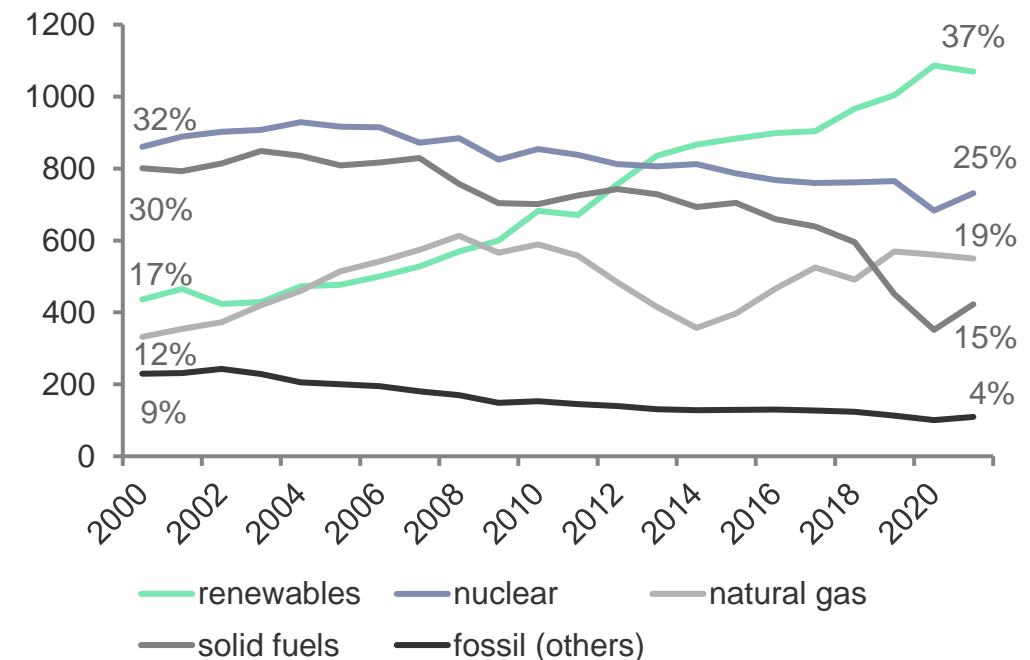
Total: 2,880 TWh

Gross electricity generation in the EU27 in 2021*
Total: 2,880 TWh



Source: Eurostat (2022)
* Preliminary data

Development of electricity generation in the EU27 [TWh]

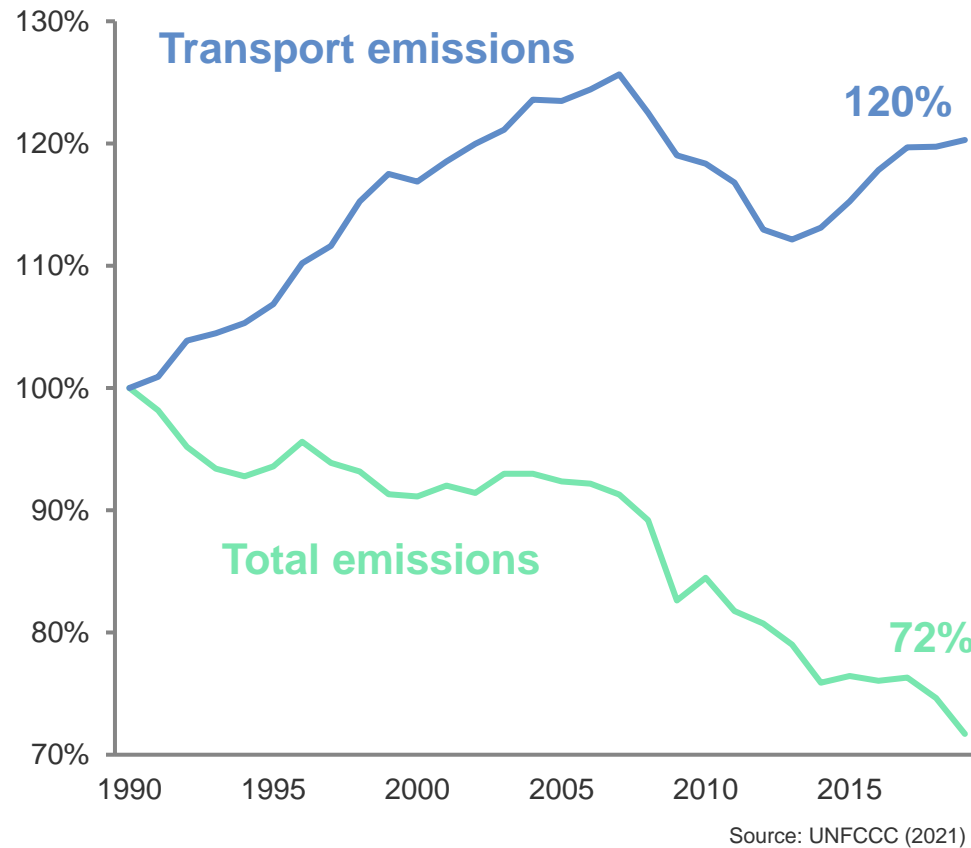


Source: Eurostat (2022), 2021 data is preliminary

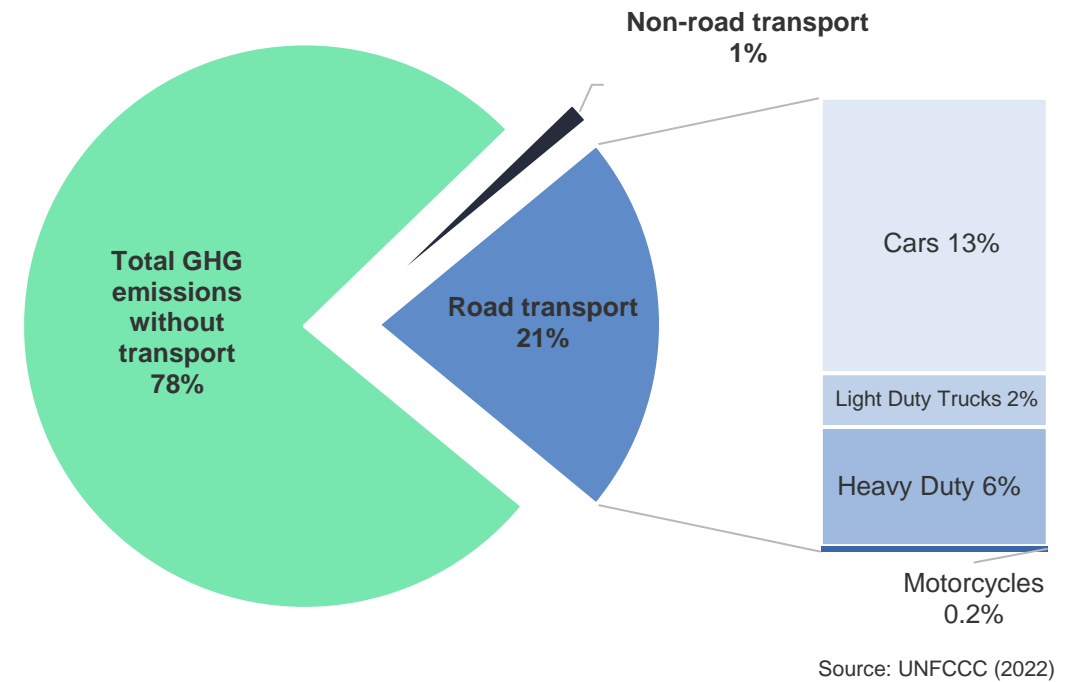
Transport emissions

Still the EU's GHG problem child

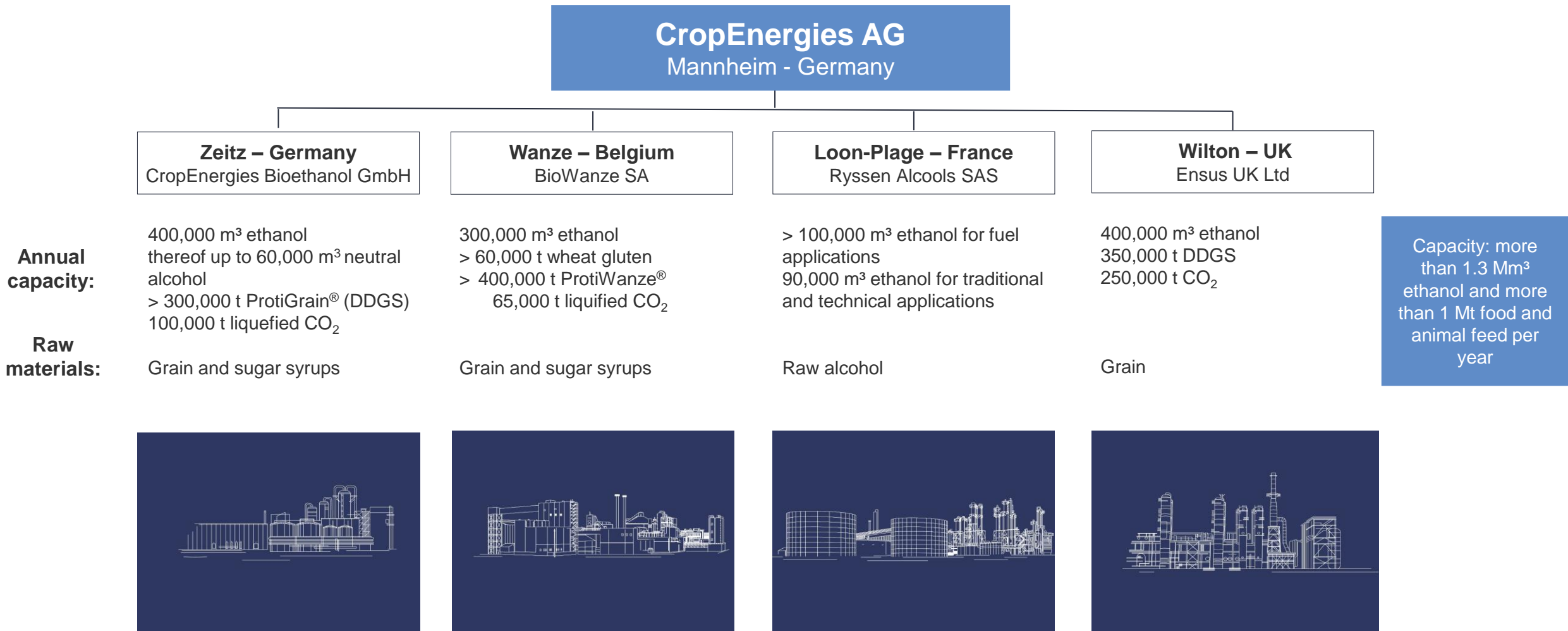
EU transport emissions still rising



Importance of road transport emissions

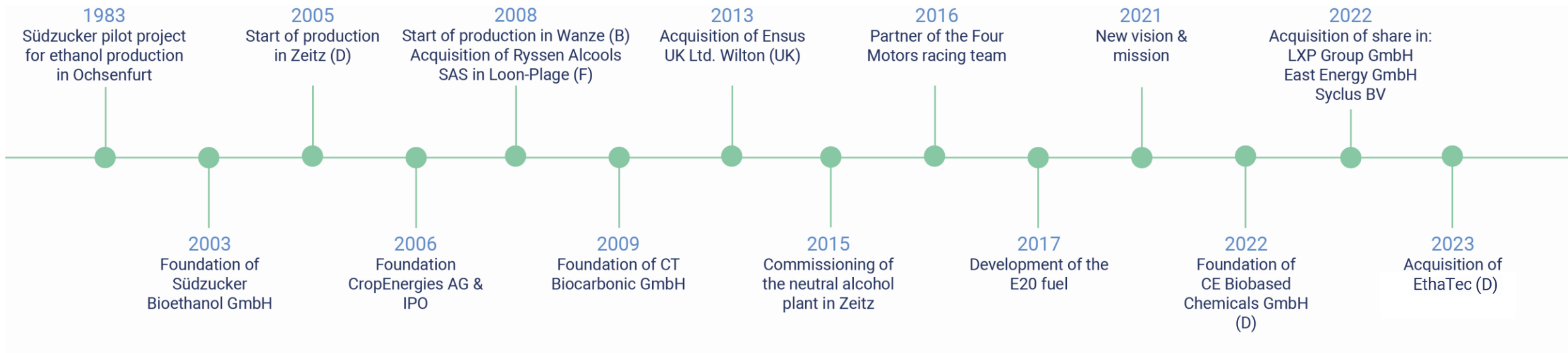


Production sites of CropEnergies

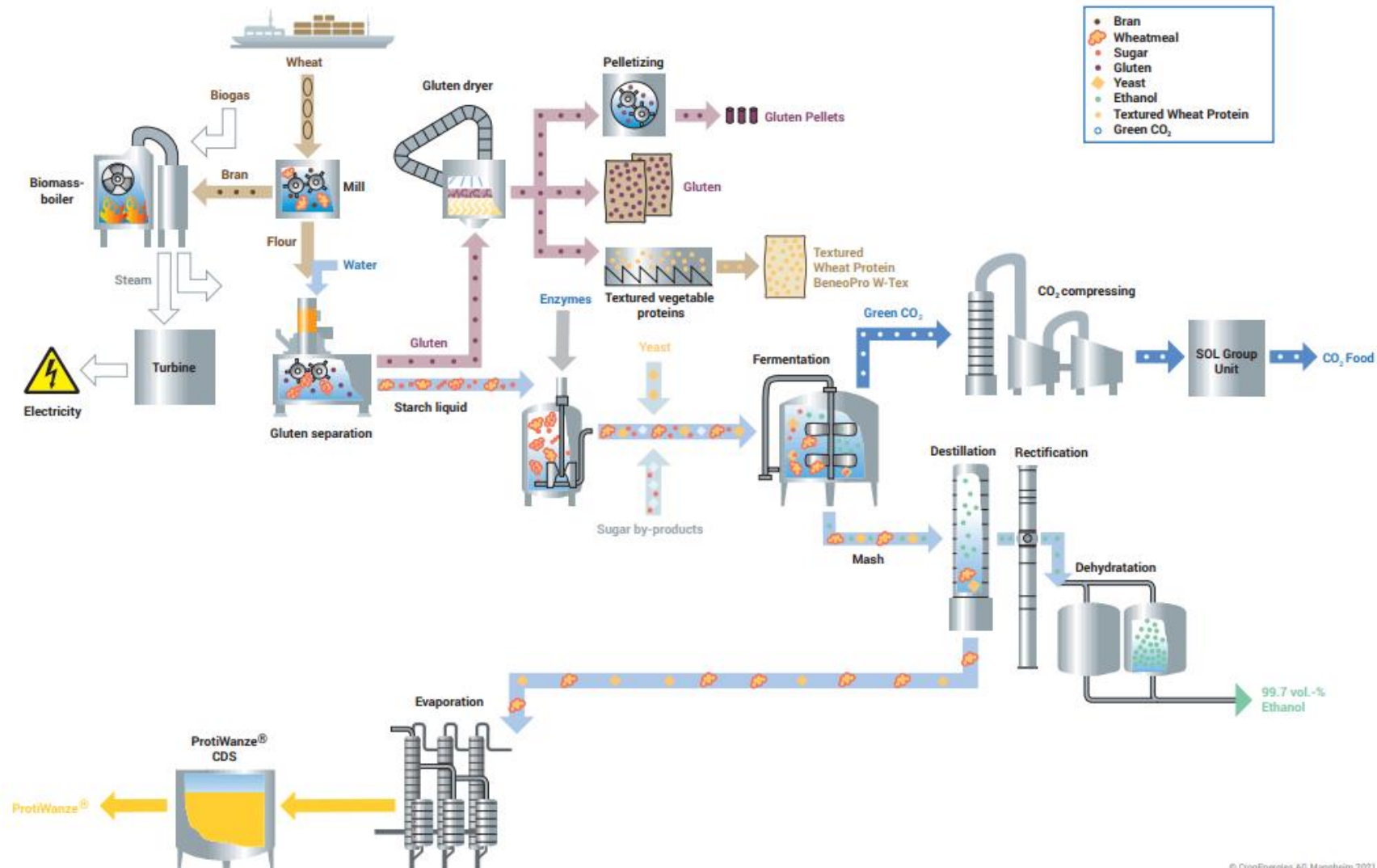


Corporate history

With roots in the Südzucker AG



Schematic Diagramm of the Production Process in BioWanze



© CropEnergies AG Mannheim 2021

Financial Calendar

10 January 2024:	Statement for the 3 rd quarter 2023/24
15 May 2024:	Annual report and press and analysts' conference FY 2023/24
10 July 2024	Statement for the 1 st quarter of 2024/25
16 July 2024	Annual General Meeting 2024
9 October 2024	Report for the 1 st half of 2024/25

Stock Information

ISIN:	DE000A0LAUP1
Symbol:	CE2
Bloomberg / Reuters:	CE2 GY / CE2G.DE
Transparency standard:	Prime Standard

Disclaimer

This presentation contains forward looking statements. The statements are based on current assumptions and estimates made by the executive board and information currently available to its members. The forward looking statements are not to be viewed as guarantees of the future developments and results presented therein. Future developments and results are in fact dependent on a variety of factors and are subject to various risks and imponderables. They are based on assumptions that could in fact prove to be invalid. The risk management report in the current annual report presents an overview of the risks. We assume no obligation to update the forward-looking statements made in this presentation. In addition, all disclaimers published on the CropEnergies website apply. This presentation includes percentage and number rounding. Typing and printing errors reserved. Written and visual value statements are standardized as follows:

± 1% - stable	± 1 – 4% - slight
± 4 – 10% - moderate	> ± 10% - significant

Contact

CropEnergies AG
Maximilianstraße 10
68165 Mannheim
www.cropenergies.com

Investor Relations

Heike Baumbach
Phone: +49 (621) 71 41 90-30
ir@cropenergies.de

Public Relations / Marketing

Nadine Dejung-Custance
Phone: +49 (621) 71 41 90-65
presse@cropenergies.de