

WE CREATE A FUTURE BEYOND FOSSILS

Investor presentation
September 2022



This is UPM

SALES 2021
EUR 9.8 BILLION

**Wood-based
raw materials**



**Low-carbon
energy**

BUSINESS AREAS:


UPM FIBRES
UPM ENERGY
UPM RAFLATAC
UPM SPECIALTY PAPERS
UPM COMMUNICATION PAPERS
UPM PLYWOOD
OTHER BUSINESSES


54
production
plants





17,000
employees in
46 countries


RENEWABLE AND RECYCLABLE PRODUCTS FOR:

 **PACKAGING**


 **LABELLING**


 **TRANSPORTATION**


 **ELECTRIFICATION**


 **CONSTRUCTION**

 **COMMUNICATION**

 **TISSUE AND
HYGIENE PRODUCTS**

 **MANUFACTURING**

 **BIOPLASTICS**

 **BIOMEDICALS**

11,400
customers



200
million end-users
globally

Our businesses



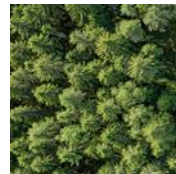
UPM Pulp

A versatile range of chemical pulp for many growing end uses



UPM Timber

Certified sawn timber



UPM Forest

Sourcing wood raw material for sustainable and recyclable products



UPM Energy

Low-emission electricity generation of hydro, nuclear and thermal power



UPM Raflatrac

Self-adhesive label materials for promotion, information and functional labelling



UPM Specialty Papers

Labelling materials, release base papers, flexible packaging papers, office and graphic papers



UPM Communication Papers

Magazine paper, newsprint and fine papers for a wide range of end uses



UPM Plywood

Plywood and veneer products for construction, vehicle flooring and LNG shipbuilding



UPM Biofuels

Wood-based renewable diesel and naphtha



UPM Biochemicals

Glycols, lignin products, renewable functional fillers



UPM Biomedicals

Wood-based biomedical products for medical and life science applications



UPM Biocomposites

UPM ProFi decking materials and UPM Formi composite material

Biofore strategy

Biofore strategy drives our transformation as a bioeconomy frontrunner.

We seek sustainable growth by enabling our customers and consumers to make more sustainable choices.

High performance, innovations and world-leading responsibility are the cornerstones. We create a future beyond fossils.

A FUTURE BEYOND FOSSILS

GROWTH

- We respond to megatrends and meet customers' changing needs
- Creating new markets and enabling sustainable choices



PERFORMANCE

- Continuous improvement
- Agile operating model



INNOVATION

- Creating new business and competitive advantage
- Replacing fossils with biomaterials



RESPONSIBILITY

- Renewable & sustainable solutions
- Responsible operations and value chain

PORTFOLIO

- Effective capital allocation
- Investing in businesses with strong long-term fundamentals for growth and high barriers to entry

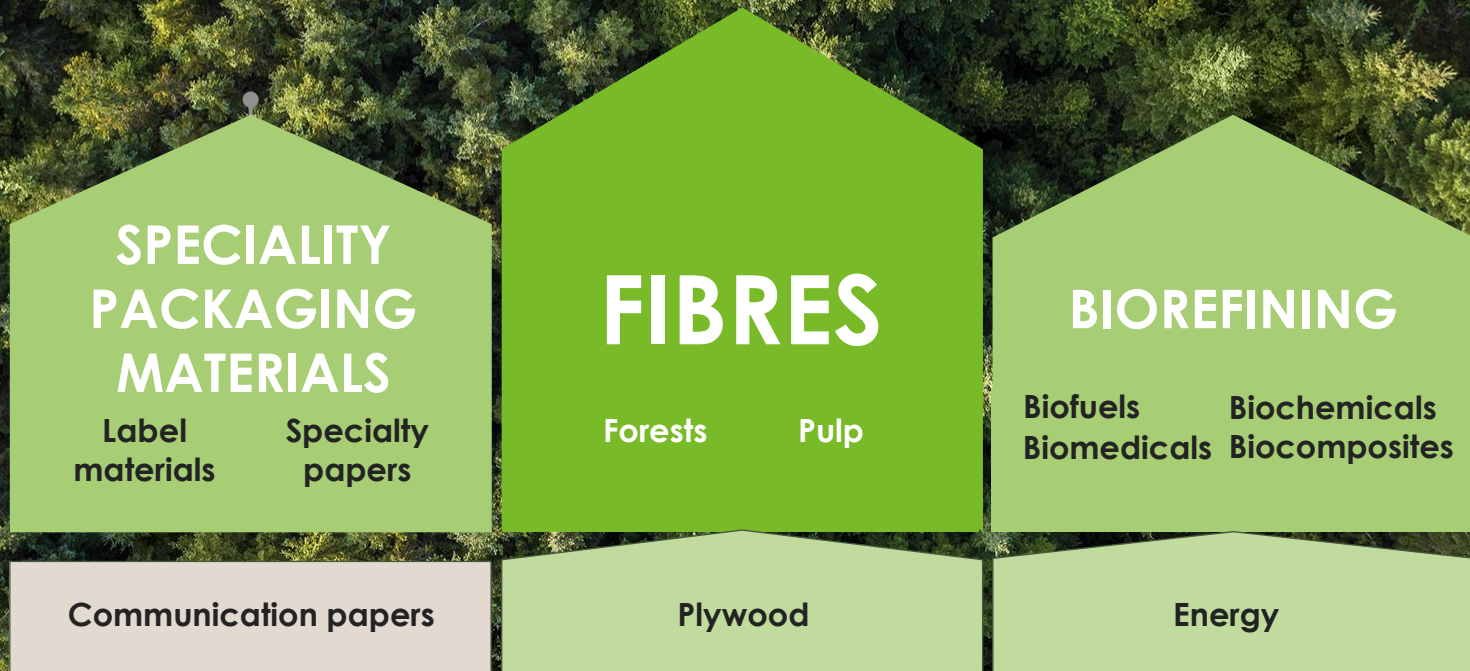
VALUES

Trust and be trusted

Achieve together

Renew with courage

Long-term value creation driven by our spearheads for growth



Our climate commitment



WE ACT THROUGH FORESTS

Committed to climate-positive forestry and enhancing biodiversity



WE ACT THROUGH EMISSION REDUCTIONS

-65% from own CO₂ emissions
-30% from CO₂ emissions of supply chain



WE ACT THROUGH PRODUCTS

Innovative products
Scientifically verifying the climate impact of all our products



SCIENCE
BASED
TARGETS

DRIVING AMBITIOUS CORPORATE CLIMATE ACTION

**BUSINESS
AMBITION FOR**

1.5°C



**OUR ONLY
FUTURE**

**THE Paris...
CLIMATE 10 years
PLEDGE Early**

Leader in responsibility

MSCI
ESG RATINGS



Global Compact
LEAD
2021 PARTICIPANT

Member of
Dow Jones
Sustainability Indices

Powered by the S&P Global CSA

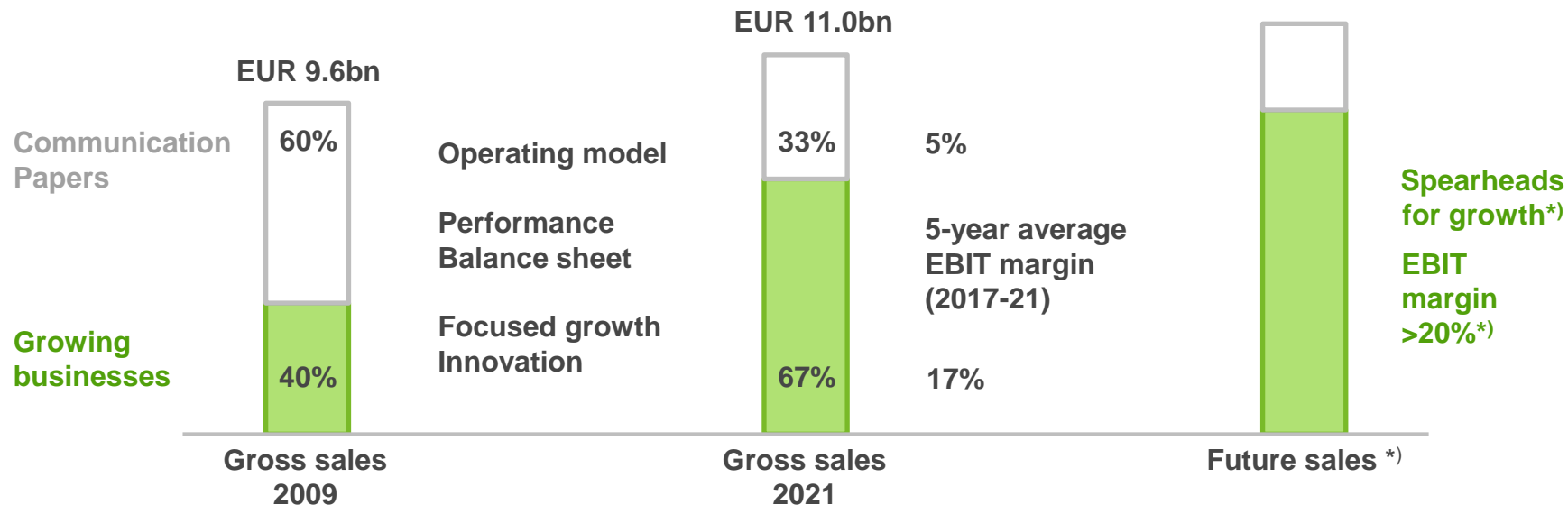
Sustainability Award
Gold Class 2022

S&P Global

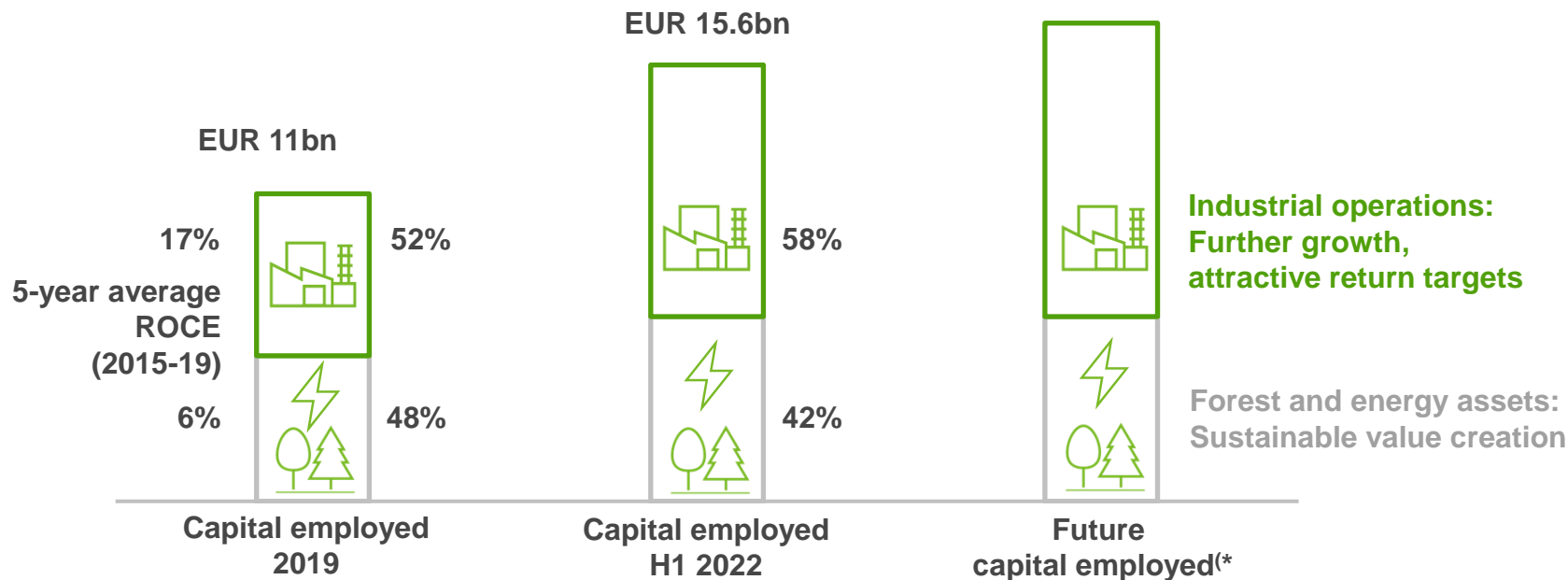


Transformation proceeds at full speed

– business mix drives earnings and shareholder value

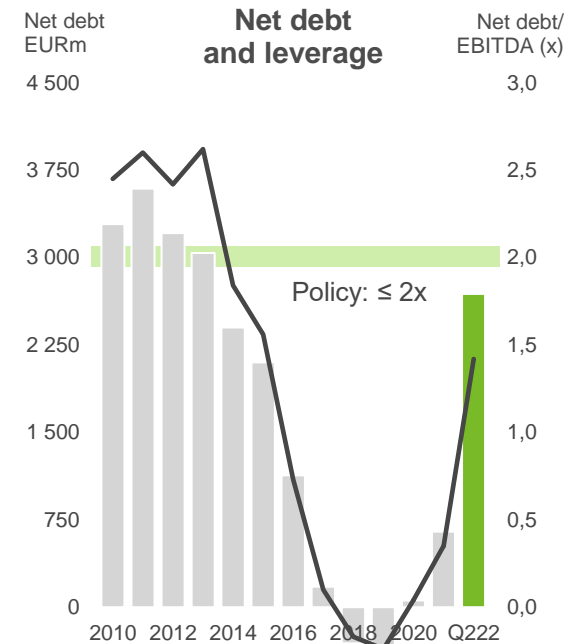
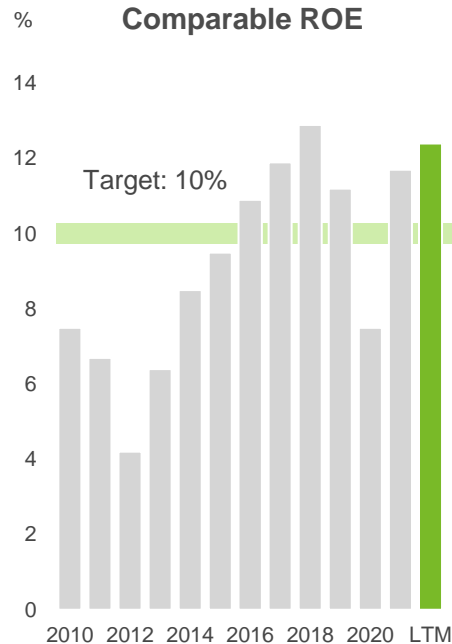
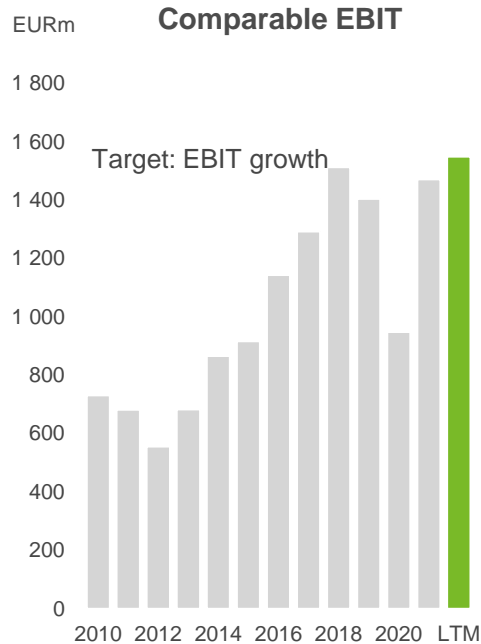


Ongoing growth investments have increased UPM capital employed – significant earnings potential as they ramp up

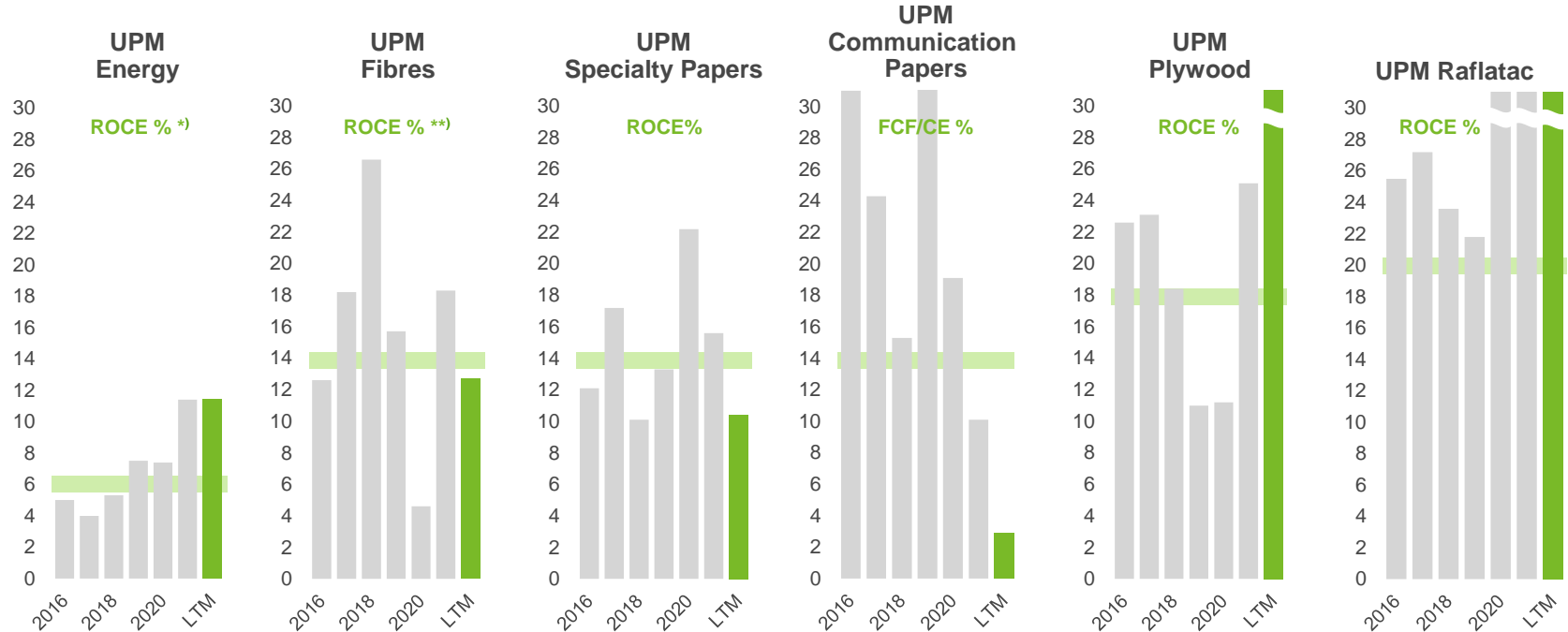


*) This is an illustration, not a forecast

Earnings back to strong pre-pandemic levels



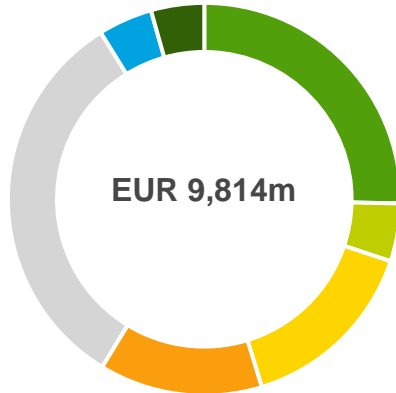
Business area long-term return targets



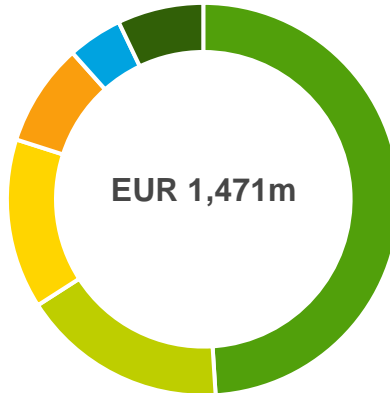
*) shareholdings in UPM Energy valued at fair value
 **) Year 2021 restated, UPM Biofuels moved into Other Operations as of 1 January 2022.

UPM by business area in 2021

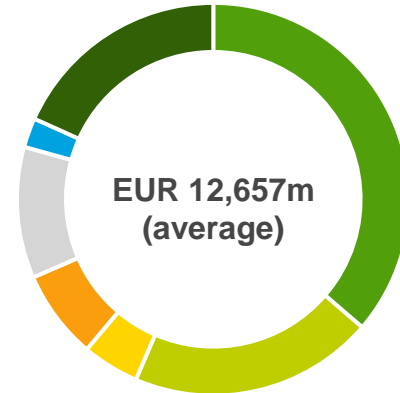
Sales



Comparable EBIT

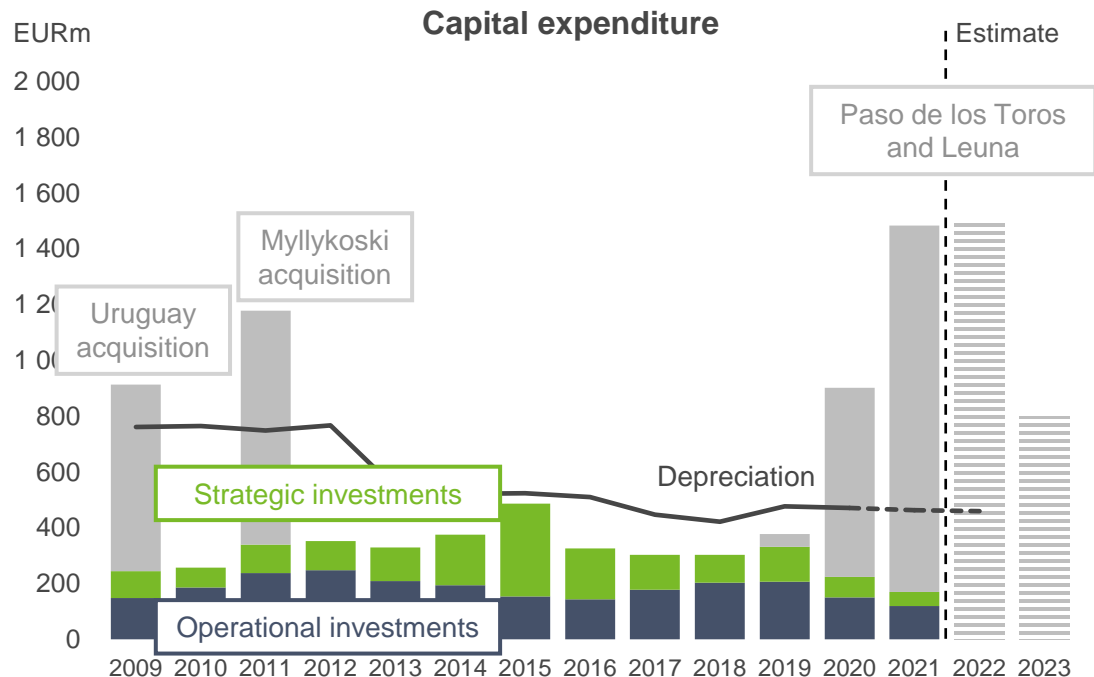


Capital employed



■ Fibres
 ■ Energy
 ■ Raflatac
 ■ Specialty Papers
 ■ Communication Papers
 ■ Plywood
 ■ Other

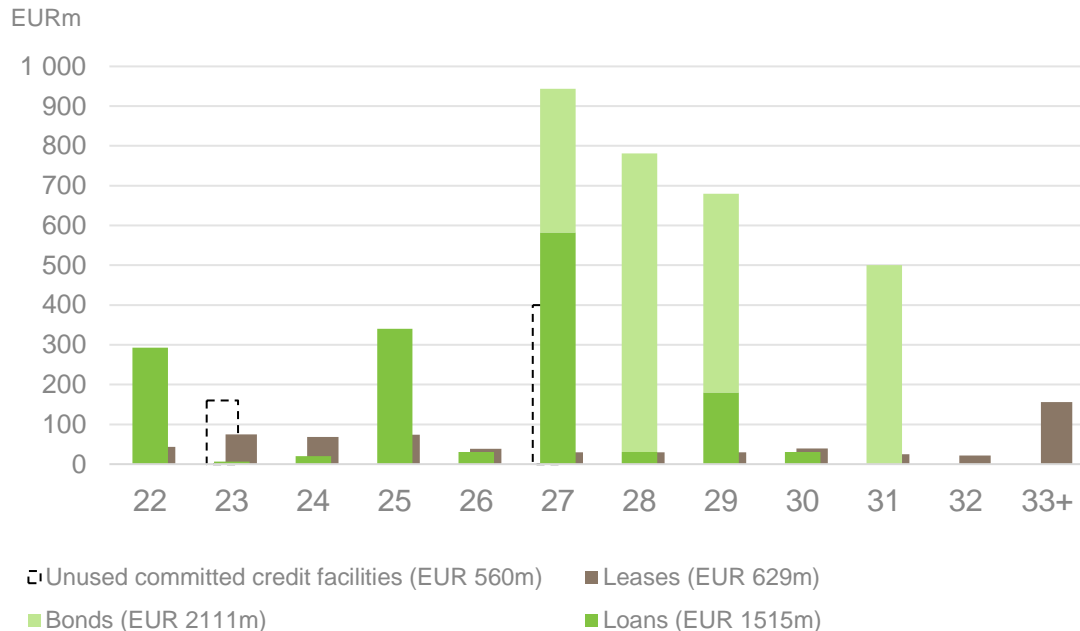
Transformative growth projects in the most intensive phase in 2021-2022



Capex estimate for 2022

- Total EUR 1,500m
- Includes EUR 1,300m on the transformative growth projects, pulp in Uruguay and biochemicals in Germany
- Operational investment needs consistently low

Maturity profile and liquidity



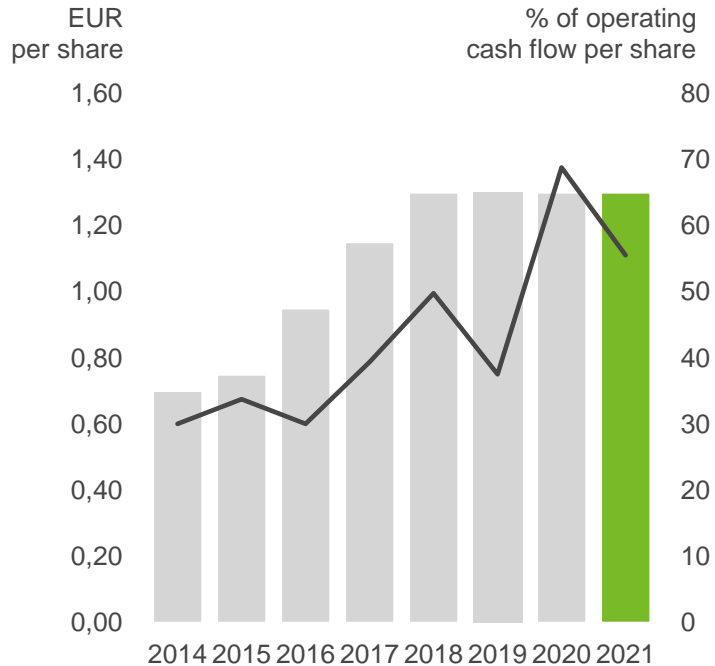
Liquidity on 30 June 2022 was EUR 1.5bn (cash funds and unused committed credit facilities)

UPM's committed credit facilities:

- EUR 160m rolling committed overdraft facility maturing 2023
- EUR 500m bilateral revolving credit facilities (EUR 300m maturing 2025 and EUR 200m maturing 2027)
- EUR 750m committed syndicated revolving credit facility maturing 2027

No financial covenants

Dividend: EUR 1.30 per share



Long term dividend policy

- UPM aims to pay an attractive dividend, 30–40% of operating cash flow per share

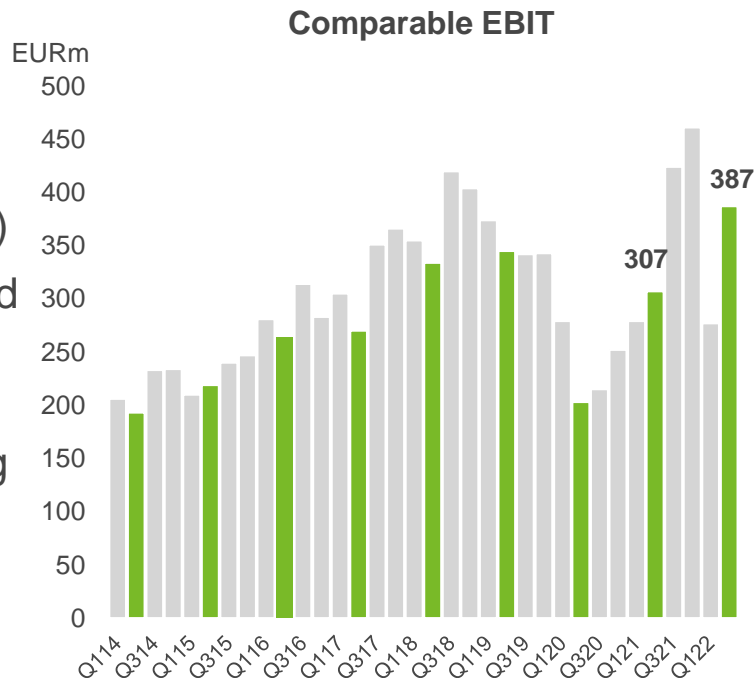
Dividend for 2021

- EUR 1.30 (1.30) per share, totalling EUR 693m
- 55% of 2021 operating cash flow

Record Q2 earnings with successful margin management in exceptional business environment

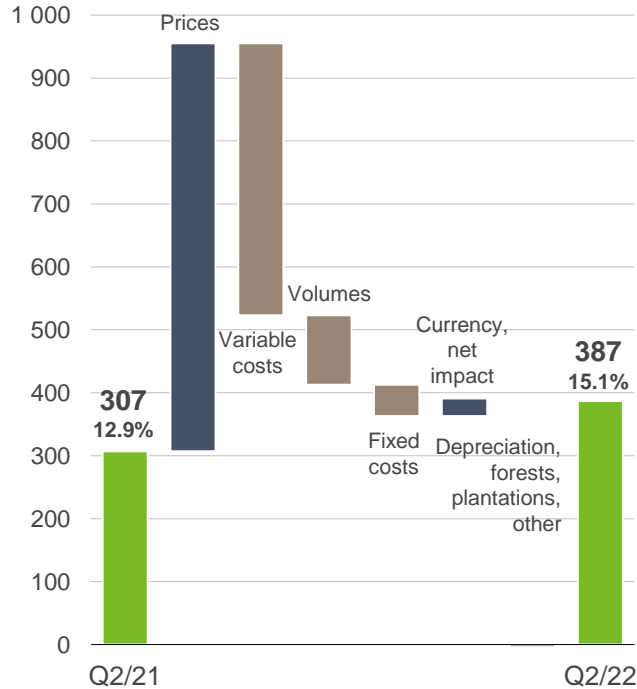


- Sales increased by 7% to EUR 2,562m (2,384m in Q2 2021)
- Comparable EBIT grew by 26% to EUR 387 million, 15.1% of sales (307m, 12.9%)
- Sales prices increased in all business areas and more than offset the negative impact of higher variable costs
- Only one month of normal full production during H1 2022
- Transformative growth projects in Uruguay and in Germany proceed well

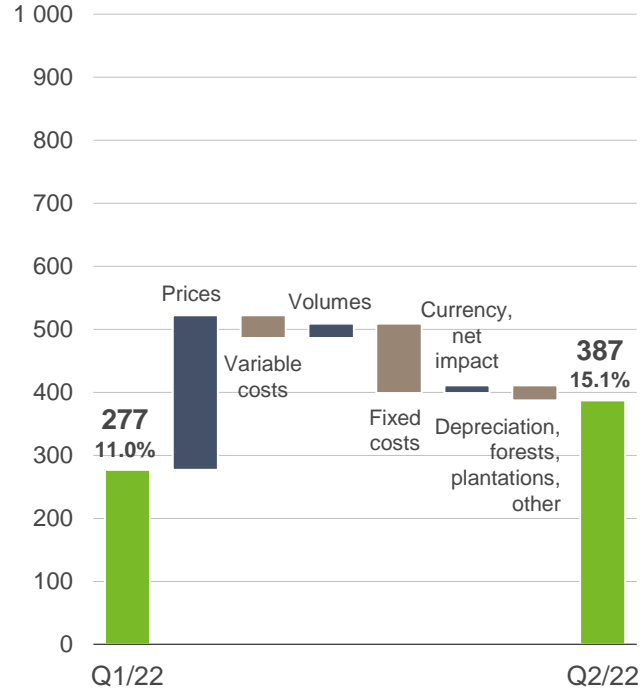


Comparable EBIT in Q2 2022

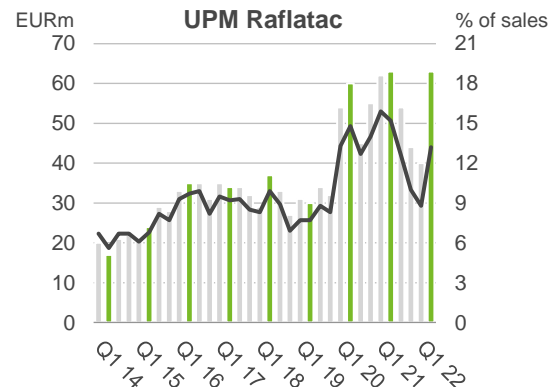
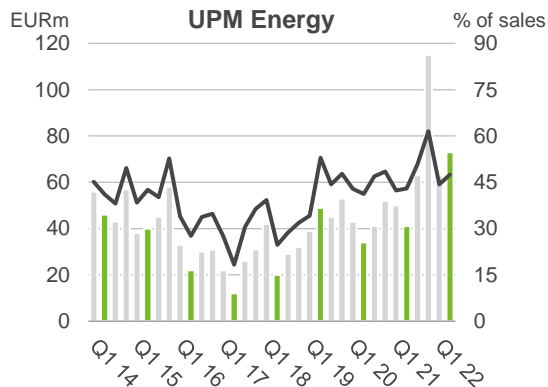
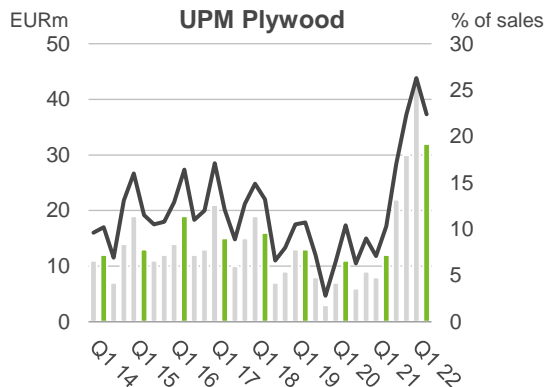
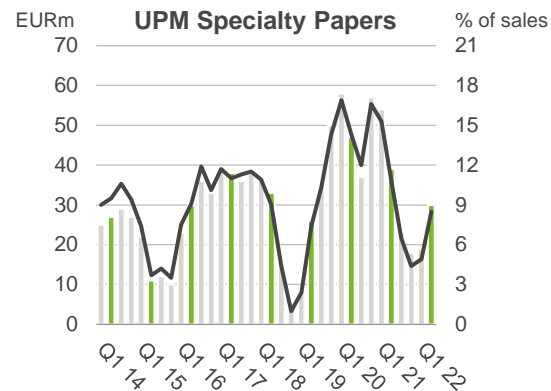
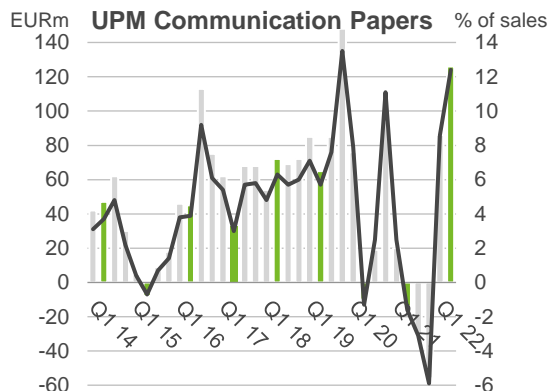
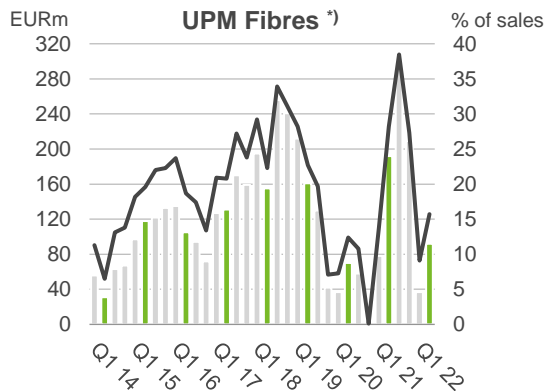
EURm



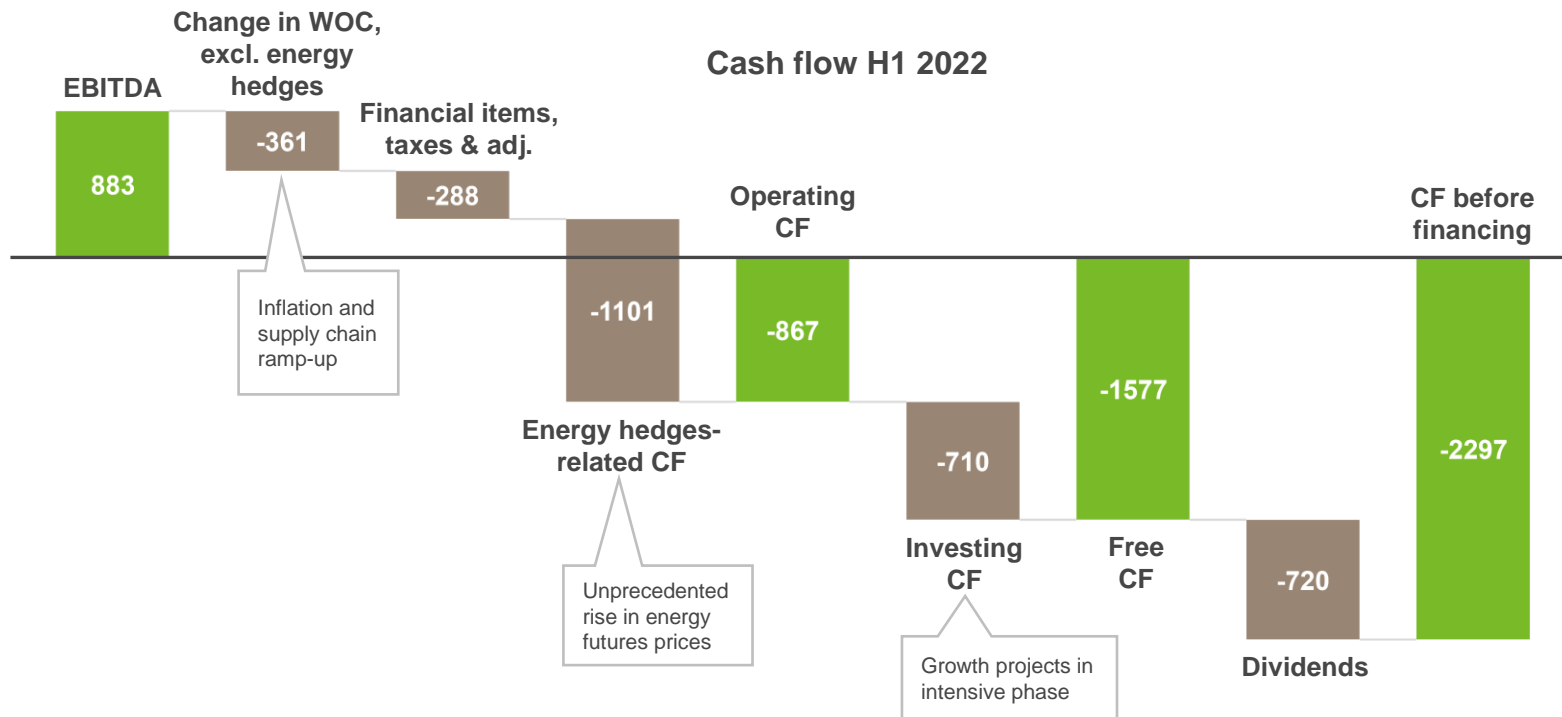
EURm



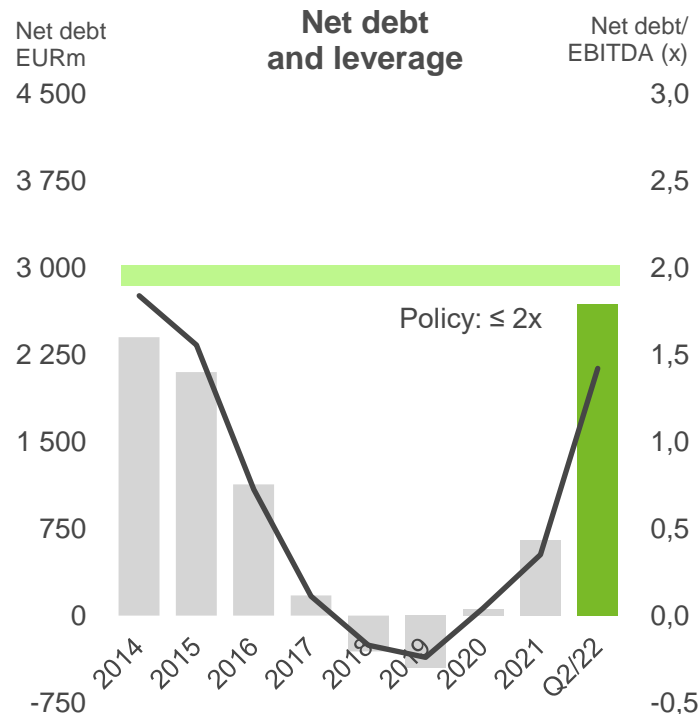
Comparable EBIT by business area



H1 2022 cash flow impacted by unprecedented rise in energy futures prices



Strong financial position, net debt temporarily impacted by the timing of cash flows



- Net debt EUR 2,688m at the end of Q2 2022
- Net debt / EBITDA 1.42
- Cash funds and committed credit facilities EUR 1.5bn at the end of Q2 2022
- Additional two credit facilities signed in July totalling EUR 0.5bn
- No financial covenants

Outlook for 2022



- UPM's comparable EBIT is expected to increase in 2022 from 2021, and in H2 2022 from H2 2021.
- Significant uncertainties remain in the outlook for 2022, related to the war in Ukraine, the ongoing pandemic, growth in the European and global economy, the energy prices and availability in Europe, the start-up of the OL3 power plant unit, and the tight raw material and logistics markets.
- In the first half of the year, production was significantly affected by the strike at the Finnish units of UPM Pulp, UPM Biofuels, UPM Raflatac, UPM Specialty Papers and UPM Communication Papers. This no longer limits production and as a result, UPM's delivery volumes are expected to increase in H2 2022 from H1 2022. In the full-year 2022 result, the estimated impact of the strike is not material.
- Sales prices and variable costs are expected to be higher in H2 2022 than in H1 2022 in most of UPM businesses. UPM will continue to manage margins with product pricing, optimising its product and market mix, efficient use of assets as well as by taking measures to improve variable and fixed cost efficiency.

UPM impacts of Russia's war in Ukraine

We have started providing humanitarian and material support to Ukraine

UPM Raflatac's distribution terminal in the Kyiv region has been closed until further notice

For the time being, UPM has decided to suspend:

- its deliveries to Russia
- purchasing of wood in and from Russia
- operations at its Chudovo plywood mill

In 2021, UPM's sales to Russia and Ukraine combined was approx. 2%

Assets in Russia were less than 1%

Less than 10% of UPM's wood sourcing to Finland originated from Russia

Q1/22 items affecting comparability: EUR 95m impairment charges

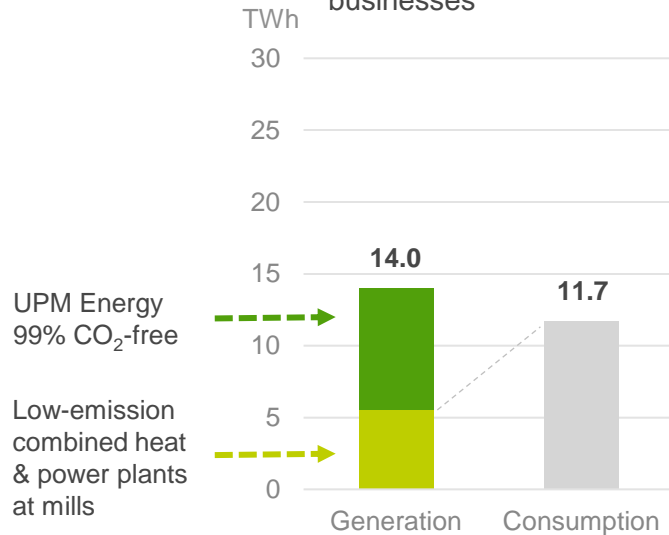
Q1/22 comparable EBIT: EUR 17m provision on expected credit losses

UPM is a large producer and consumer of energy



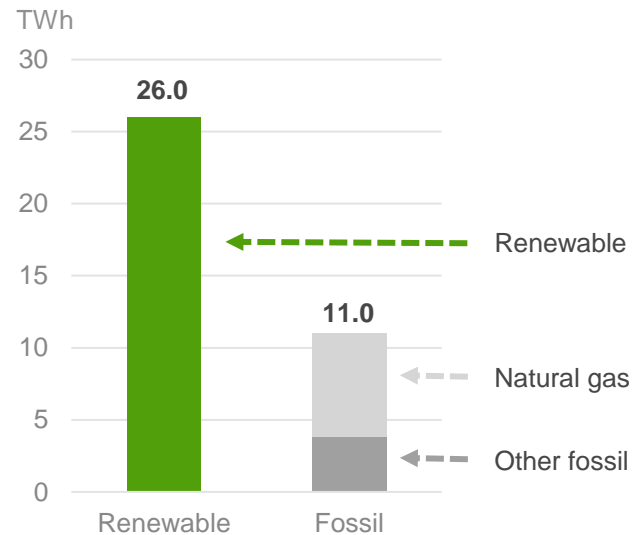
Electricity

Separate market-driven operations at UPM Energy and the energy-consuming businesses



Fuels

70% of all fuels are renewable, from the industrial processes



Hedging

Approx. 60% of electricity and fuel purchases hedged for 2022

CO₂

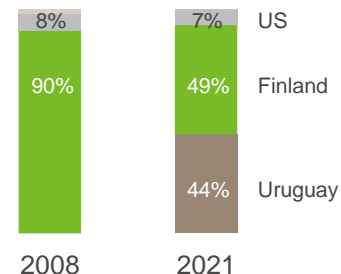
due to implemented emission reductions, UPM has more emission allowances than it needs

Developing our forest assets

UPM forests and plantations

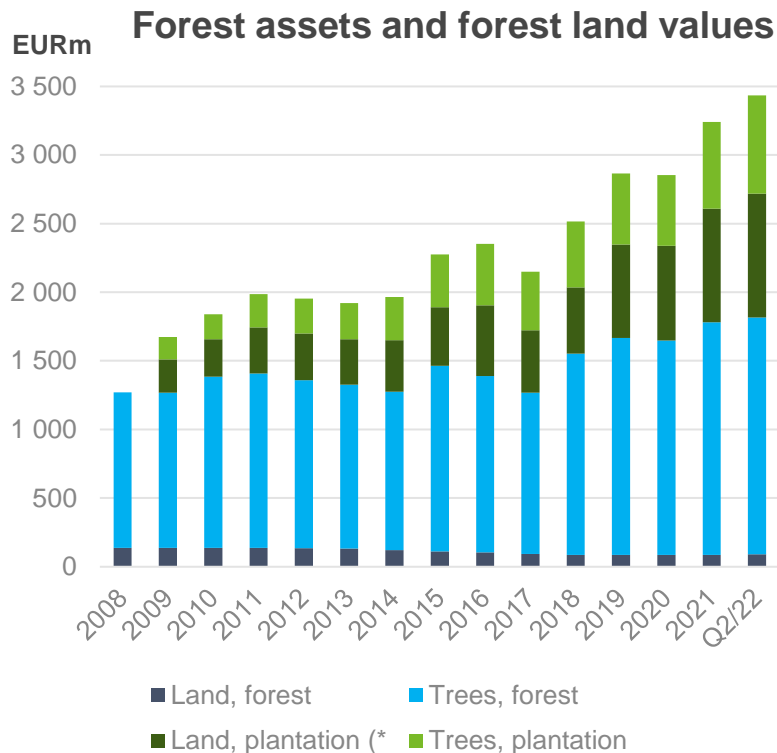
	2008	2021
Forest and plantation land (own and leased) (1,000 ha)	1,012	1,057
Forest growth (million m ³)	4.3	8.8
Wood sourced from UPM forests and plantations (million m ³)	2.2	3.6
Value of forests and plantations, including land (EURm)	1,270	3,241

Area distribution



Investing in strategic forest assets in Uruguay
 Releasing capital from forests far from our mills
 Productivity with active management and nurseries
 Strong commitment to sustainability

Active forest strategy – UPM's forest assets are increasingly productive and valuable



Uruguay plantations

“fast turnover, low inventory”

- Value EUR 1.6bn
- Continuous productivity improvement (pulp tonnes/ha)
- Investing in strategic forest assets

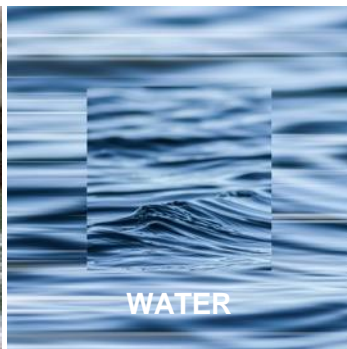
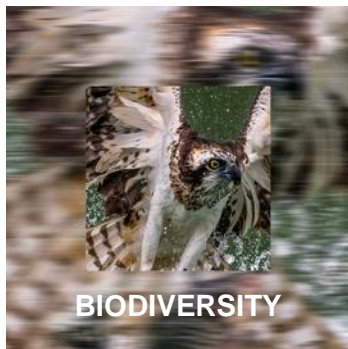
Finland and other northern forests

“slow turnover, high inventory”

- Value EUR 1.8bn (+43% since 2008, EUR/ha +140% since 2008)
- Decreased area (-42% since 2008), focusing on forests close to mills
- Improved growth (m³/ha)
- Trend price (EUR/m³)

FOREST **ACTION**

The **UPM Forest Action** programme takes a holistic view,
covering the five fundamentals of responsible forestry:



New business in wood-based biochemicals

Responding to strongly growing demand for sustainable solutions



Industrial scale 100 % wood-based biorefinery in Leuna, Germany



Alternatives to fossil materials in various consumer-driven end-uses



EUR 750 million investment
Total annual capacity of 220,000 tonnes
ROCE target of 14%



Scheduled to start up by the end of 2023



Renewable product range



- **Bio-monoethylene glycol (bMEG)**
for textiles, PET bottles, packaging, deicing fluids
- **Renewable functional fillers**
for rubber applications as a sustainable, light-weight and high-purity alternative to carbon black and silica
- **Bio-monopropylene glycol (bMPG)**
for composites, pharma, cosmetics, detergents
- **Industrial sugars**
for various applications in chemicals industry



Large growth markets – unique sustainability value



- The global glycols market is more than 30 million tonnes, with expected annual growth of approx. 4%
- The global market of carbon black and silica is more than 15 million tonnes, with expected annual growth of approx. 3%
- Current market supply based on non-renewable raw materials
- Customers increasingly committed to sustainable solutions
- UPM's renewable raw material and new technologies provide significant reduction in carbon footprint
- UPM biochemicals fit directly into customers' processes and the existing recycling infrastructure

UPM Fibres

UPM Paso de los Toros – World-class pulp mill

**Highly competitive cash cost of
USD 280 per delivered tonne of pulp**



Pulp mill and deep seaport
terminal in Montevideo
Jobs and other opportunities
for the residents of the region



Pulp is used in tissue,
specialty and packaging
papers, for example



USD 3.47 billion investment
Total annual capacity
of 2.1 million tonnes of
eucalyptus pulp



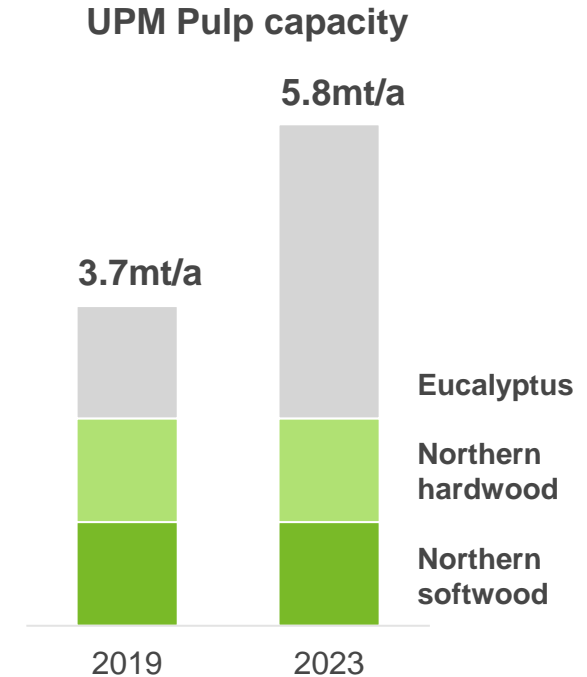
Scheduled to start
up in Q1 2023



Transformative step in UPM's pulp business and in UPM's future earnings



- Significant step for UPM's future earnings
 - One of the most competitive mills in the world
 - Expected cash cost level of USD 280 per delivered tonne of pulp^(*)
 - Attractive returns in various market scenarios
 - Carefully prepared to ensure long-term competitiveness and to minimise risks both in the project phase and during continuous operations
- Step change in UPM's pulp business



Competitive wood supply



Eucalyptus availability secured through UPM's own and leased plantations and wood sourcing agreements with private partners

UPM's own and leased plantations in Uruguay cover 500,098 hectares, supplying both UPM Fray Bentos and the new mill near Paso de los Toros

30 years experience of sustainably managed and productive plantations



Efficient logistics set-up



UPM will invest USD 280 million to construct a deep sea pulp terminal in Montevideo port

Direct rail access from the mill to a modern port terminal creates an efficient supply chain to world markets

Synergies with the UPM Fray Bentos mill

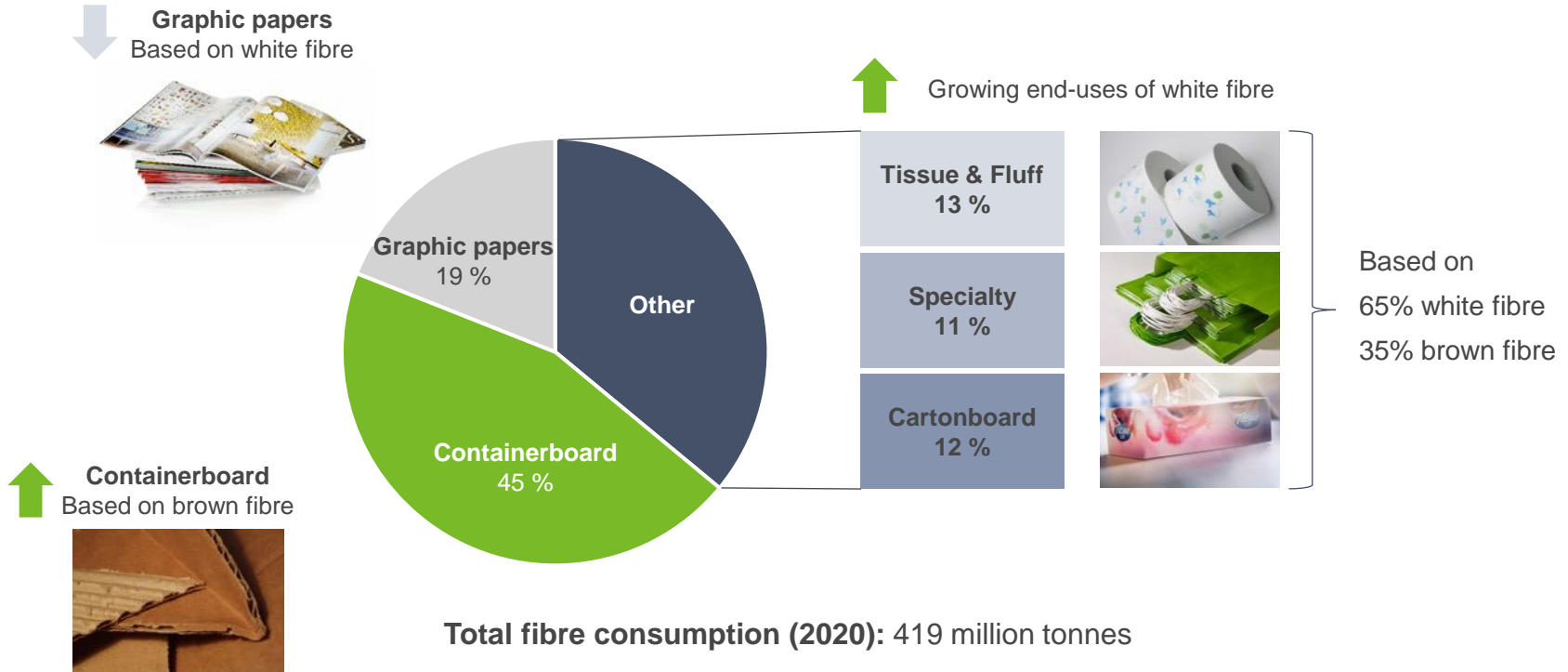
Agreed railway modernisation

Public-private-partnership agreement between the government and the construction company

Agreed road improvements



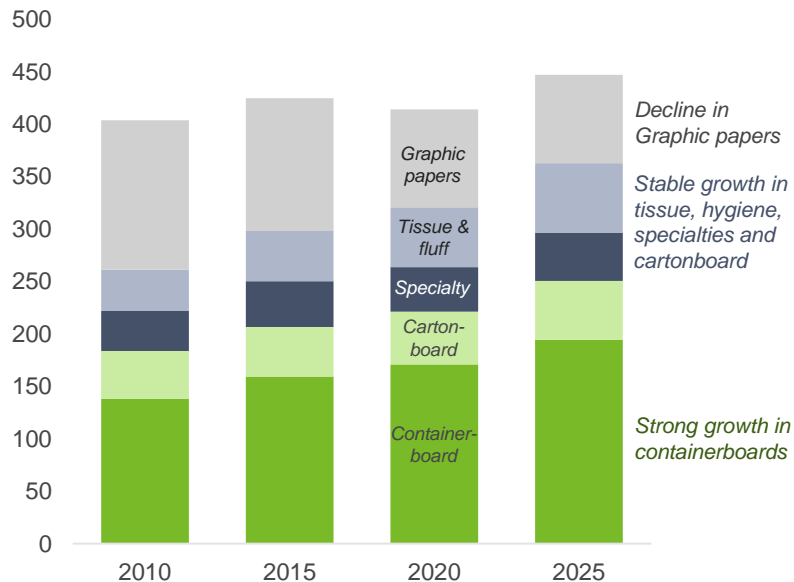
Market pulp consumed in growing end-uses – alternative white fibre demand overcoming graphical paper decline



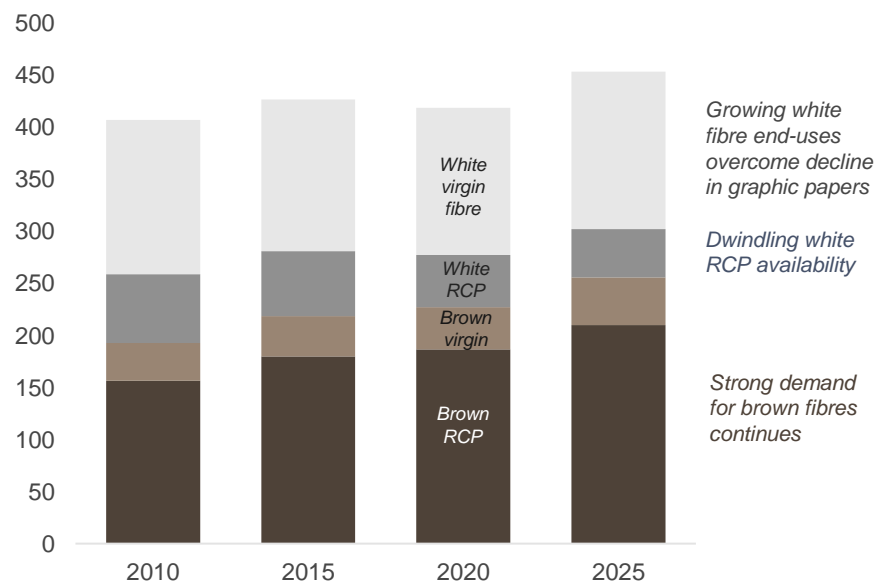
Pulp demand outlook



Global consumption of end-uses
in million tonnes



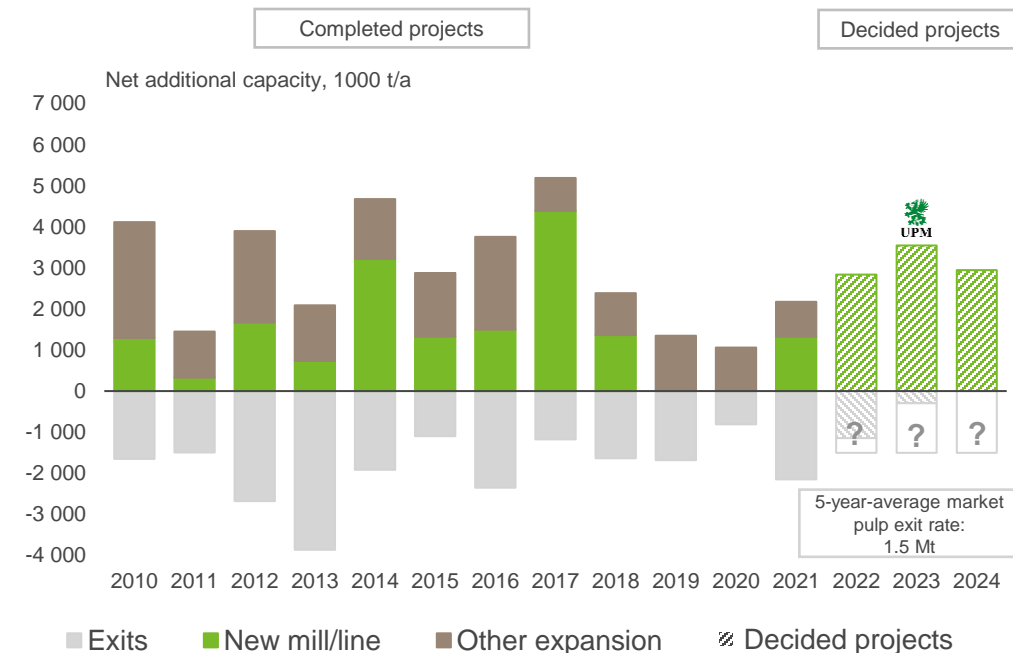
Global consumption of fibres
in million tonnes



Moderate numbers of decided projects in the short-term



Entry of market bleached pulp capacity



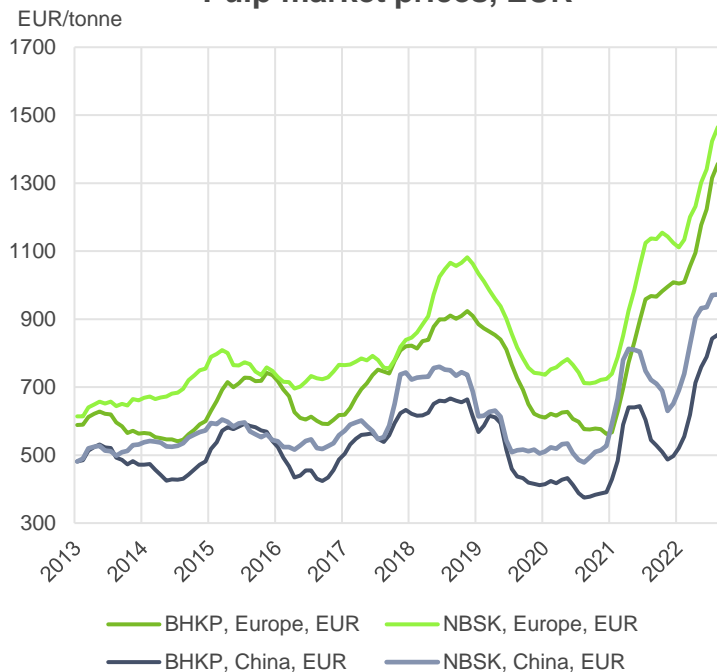
Note: including BHKP, BSKP, excluding fluff and dissolving

UPM Fibres

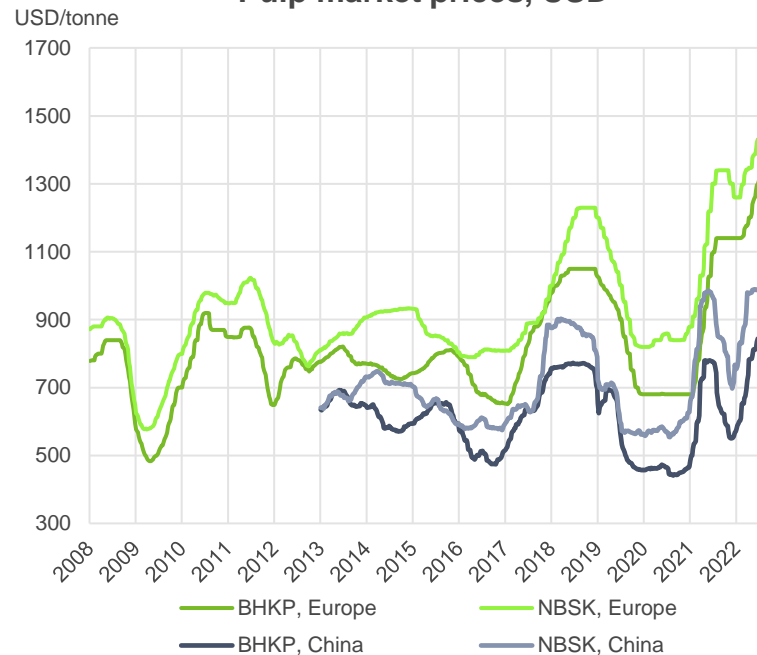
Chemical pulp market prices



Pulp market prices, EUR



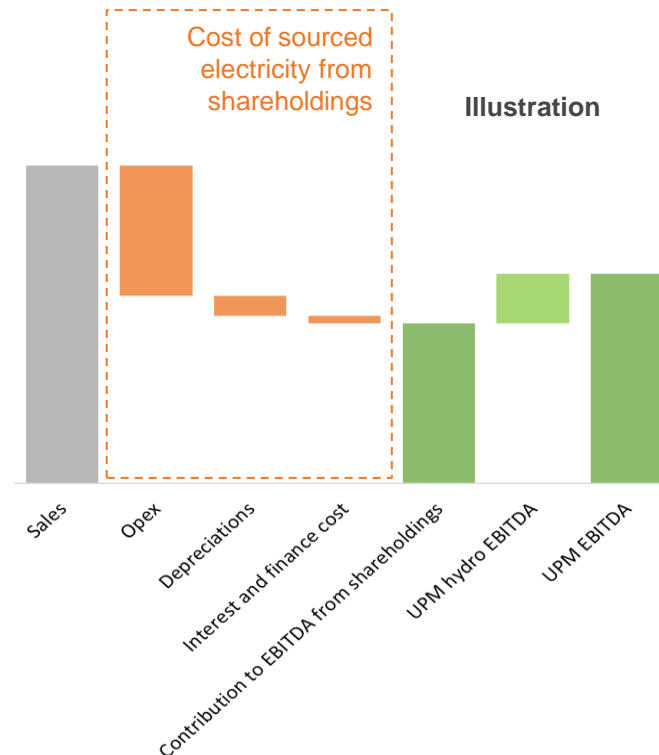
Pulp market prices, USD



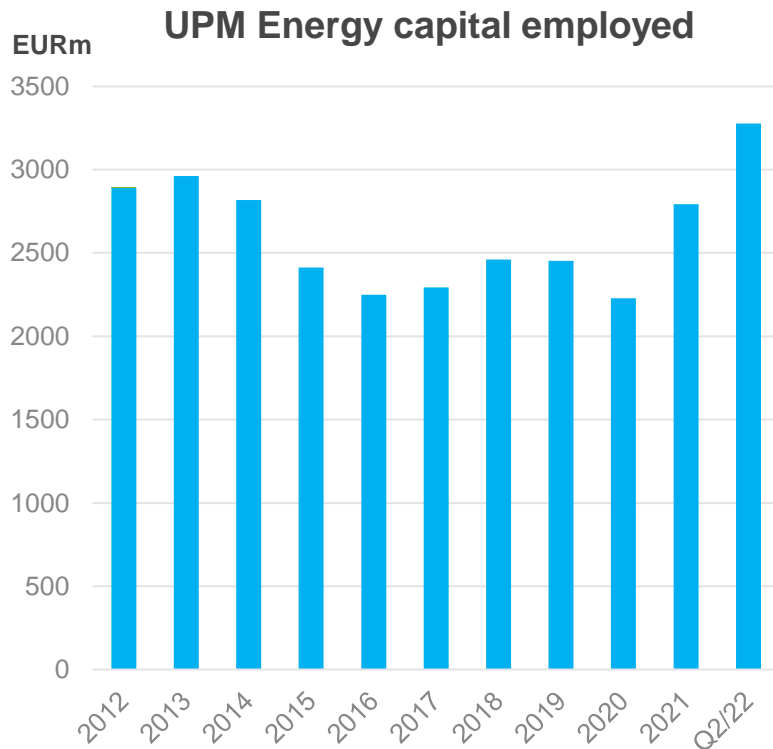
Source: FOEX Indexes Ltd

UPM Energy's power generation	MW	EURm
Hydropower holdings	560	1,092
Nuclear power OL1 and OL2	588	1,561
Nuclear power OL3 (PTO 12/2022)	494	499
Thermal power	154	1
UPM Energy's shareholdings in total, valued at fair value	1,796	3,152
UPM own hydropower assets	166	
UPM Energy's in total (incl. OL3)	1,962	
UPM Energy capital employed		3,276

UPM Energy sources electricity from part owned energy companies at full cost (cost-price principle, mankala principle)



UPM Energy's assets are competitive, CO₂-free and increasingly valuable



Hydropower

- Flexible generation, crucial to balance the volatile system
- Renewable, CO₂-free
- Value EUR 1.3bn

Nuclear power

- Reliable baseload generation
- CO₂-free
- Unique and safe solution for final disposal of spent fuel
- Value EUR 2.0bn

Olkiluoto 3 EPR – significant growth step for UPM Energy and Finland's largest climate action



OL3 will increase UPM Energy's carbon free electricity generation by nearly 50%

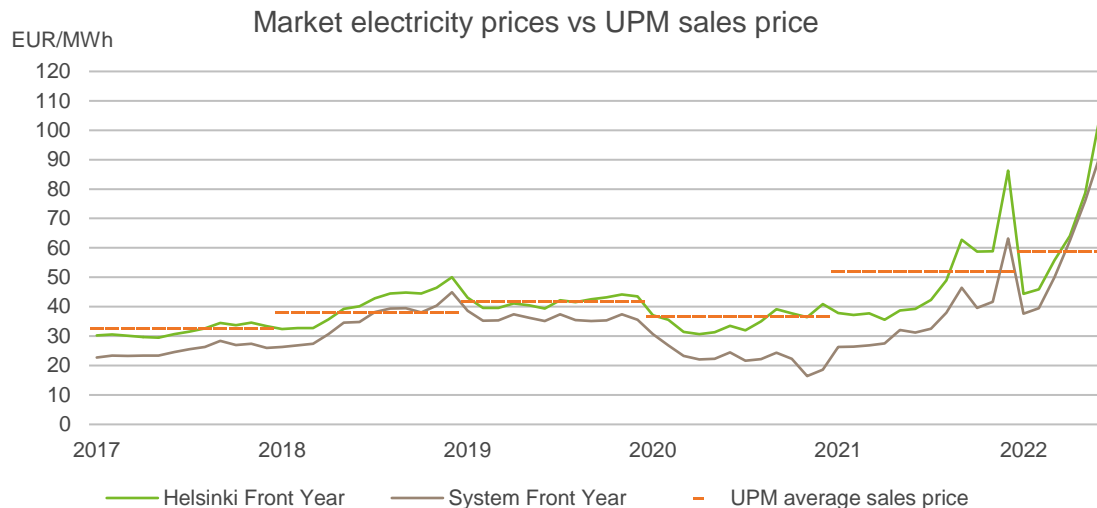
Reliable CO₂-free baseload energy to support the electrification of the society

Unique and safe solution for final disposal of spent fuel

Finland's electricity self-sufficiency significantly improved, carbon neutral generation to about 90%



Cost efficient generation enables robust profitability in changing market environment



UPM Energy profitability	2017	2018	2019	2020	2021	H1/2022
Comparable EBIT, EURm	91	123	185	171	270	136
% of sales	32.7	28.8	31.5	44.4	45.0	45.9

UPM Raflatac

Self-adhesive labels in end-use



Pharmaceuticals



Wine, spirits & craft beverage



Food



Personal care



Home care



Durables



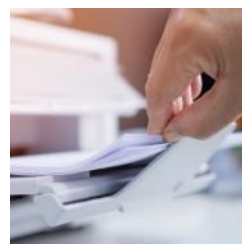
Transport & logistics



Industrial Chemical



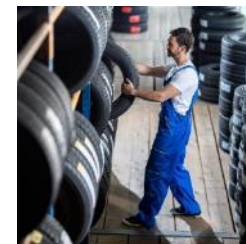
Retail



A4 & cut-size



Security & brand protection



Tyre

The labelstock markets have solid long term demand growth trends – short term can be more volatile



The long term demand growth outlook remains a solid 3-4% p.a.

However in the short term the demand changes can be more dynamic

The demand of UPM Raflatac's end use portfolio is relatively resilient

Growth drivers



Packaging unit growth in Food, Personal Care, Beverage



E-Commerce growth & parcel logistics



Niche segments (e.g. pharmaceuticals)



Further trends benefitting labelstock: **sustainability**, wet glue substitution

Impact to labelstock demand



Consumer **stockpiling**



Lockdowns

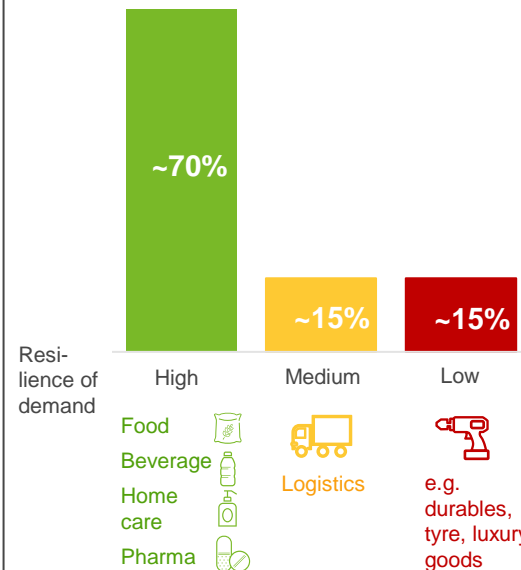


Value chain **inventory cycle**



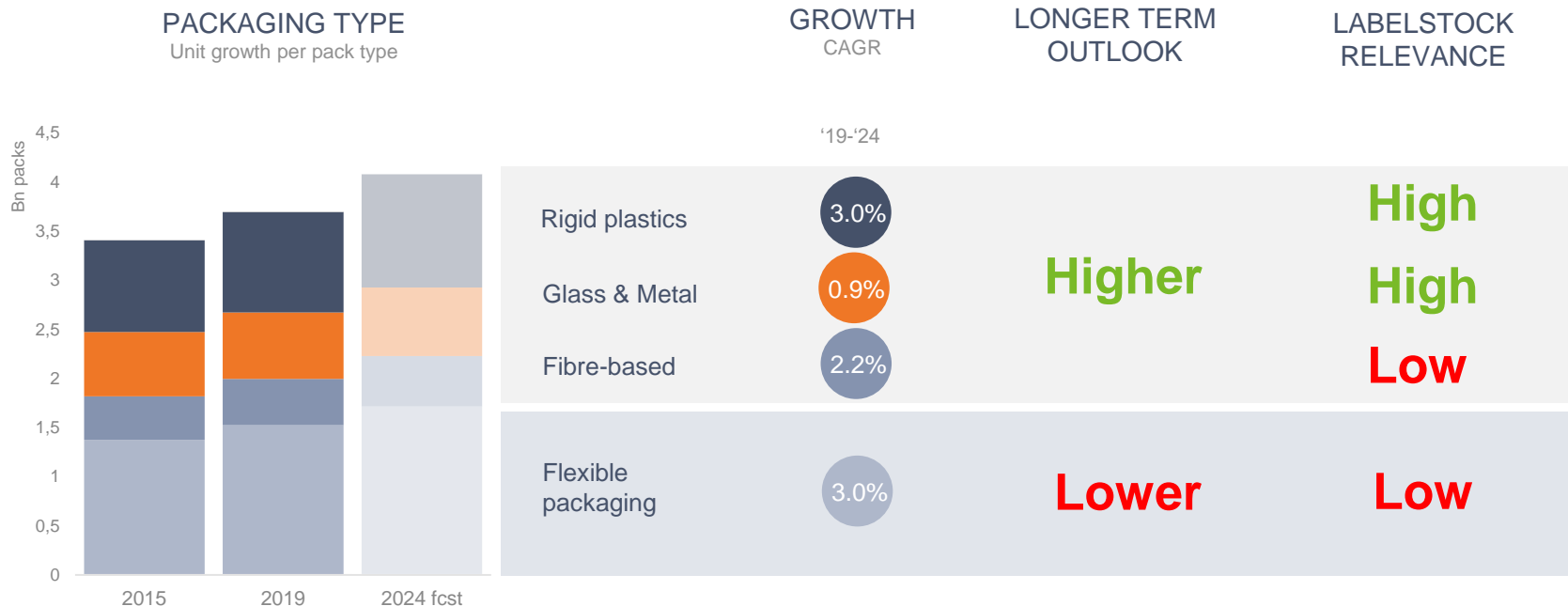
Private consumption changes

Indicative share of UPM Raflatac business (%)



Early signs of recycling impacts:

Packaging decisions to favour labelstock



Source: Euromonitor September 2020; UPM Raflatac perspective

Focus on global Labelling materials, Packaging in Europe and Office paper in APAC



LABELLING MATERIAL



PACKAGING



OFFICE PAPER APAC



UPM Specialty Papers is well positioned for growth in the selected markets



LABEL & RELEASE

Leading position in growing global label and release paper markets



PACKAGING PAPERS

Selective approach in consumer packaging area. Well positioned for future growth.



APAC FINE PAPERS

One of the leading players in office papers, focused niche player in graphic papers



Market growth forecast, CAGR 2020-2025

Global
release liner
3-4%

Global
flexible
packaging
2-4%

Paper

Global
flexible
packaging

Plastics

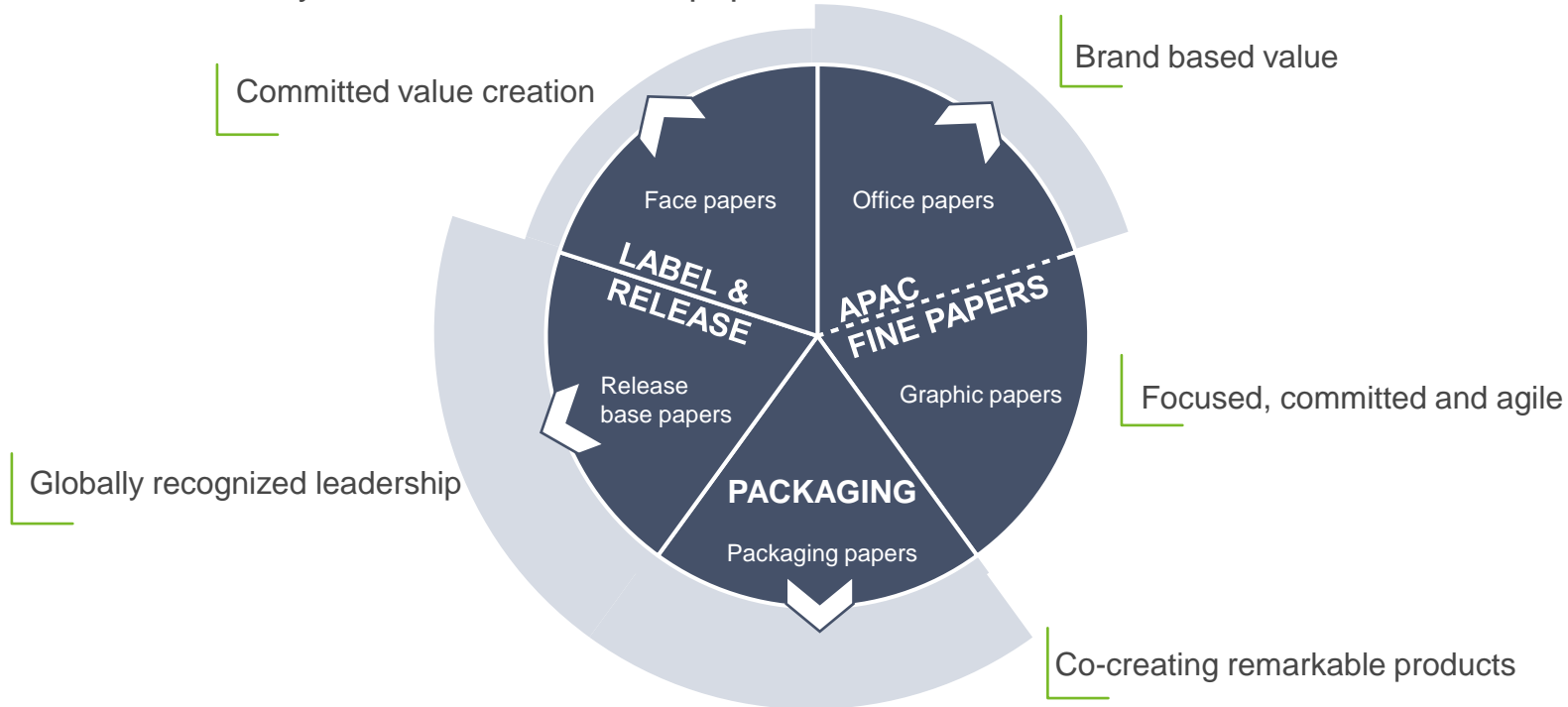
APAC office
papers
1-2%

UPM Specialty Papers

UPM Specialty Papers **GROWTH STRATEGY**

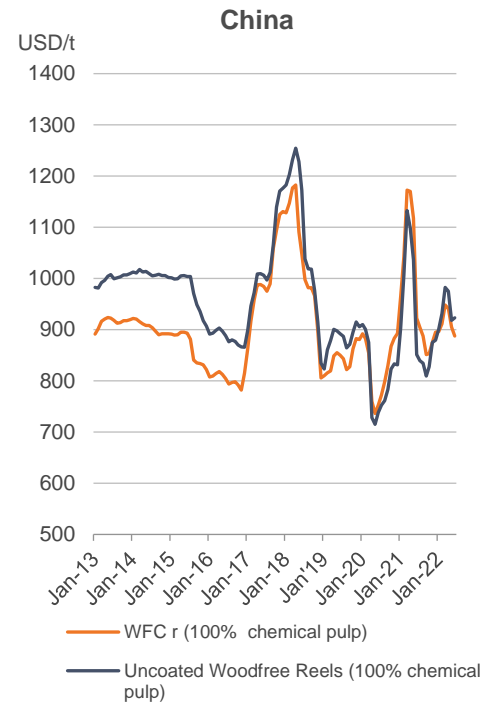
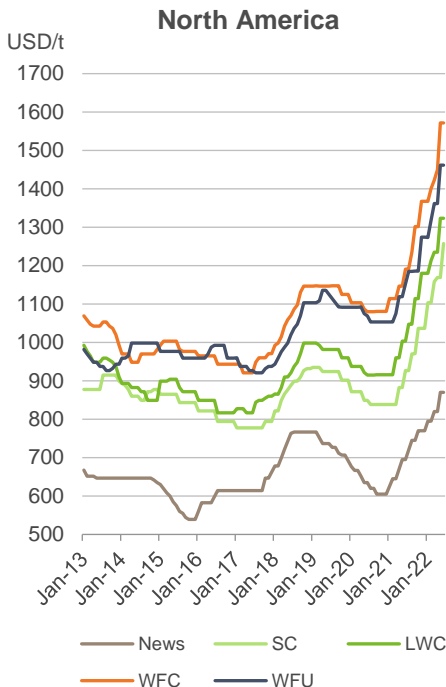
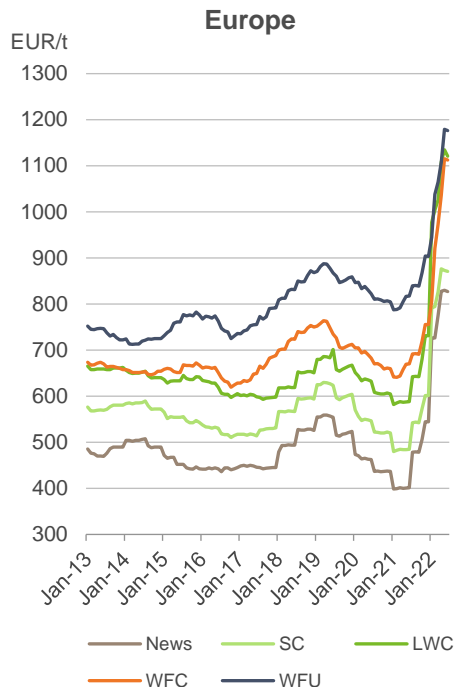


We co-create a future beyond fossils with
renewable, recyclable and remarkable papers



UPM Communication Papers

Graphic paper prices

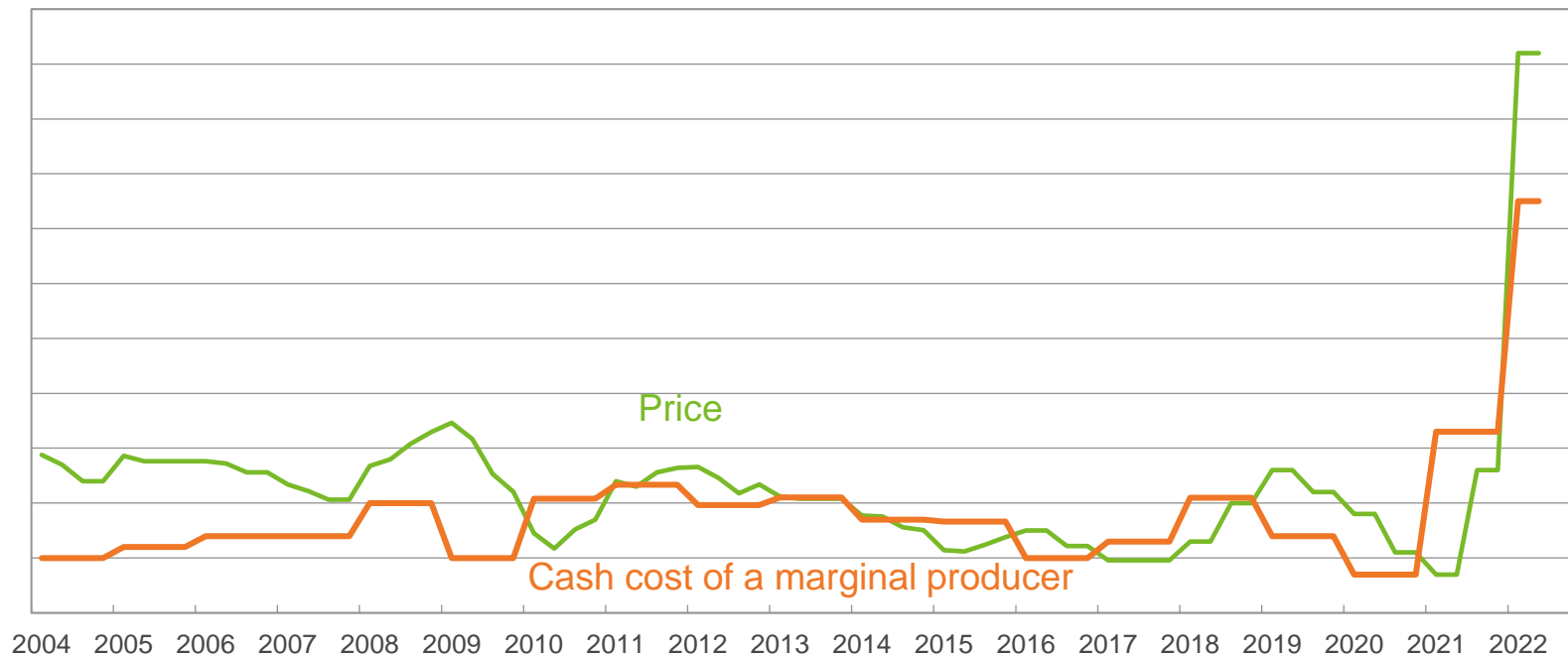


Sources: PPI, RISI

Paper price vs. cash cost of marginal cost producer



EUR/t



Sources: PPI, RISI, Pöyry

UPM Plywood focuses on three end use segments



Construction



UPM's position and direction

- Leading position in high and medium range standard products in Europe through well established distribution network providing easy access to WISA® plywood
- Uncompromised sustainability, certified products and operations
- New growth sought by strengthening position in selected emerging markets

Vehicle flooring



UPM's position and direction

- Leading position in Europe
- Competitive edge built on smoothly running operations and needs-based product design creating value to both vehicle manufacturers and operators
- Growth sought by expanding to new markets and related end use segments

LNG shipbuilding



UPM's position and direction

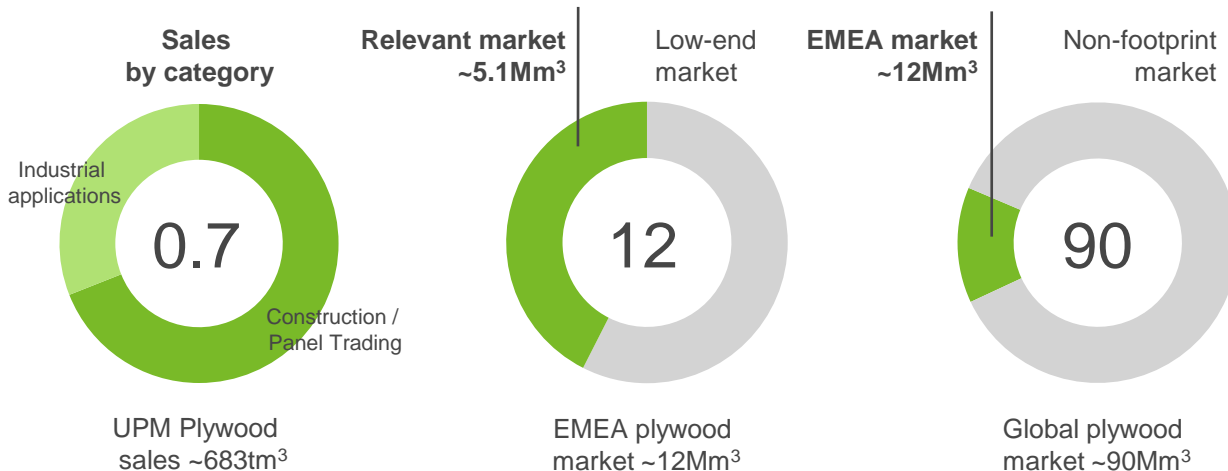
- Leading supplier in LNG plywood
- Competitive edge based on right quality and accurate on-time deliveries
- Long term commitment and benchmark service level
- Focus to secure leading position in LNG carriers and to extend offering into related applications using the same technologies (e.g. land storage tanks)

UPM's key markets are in the high and mid segments primarily in EMEA region



Strategic choices

1. Demanding industrial applications
2. High and medium range standard products
3. Selected customers
4. EMEA region and LNG business globally



Moving forward with biofuels growth plans

Basic engineering phase of a next generation biorefinery



Potential industrial scale biofuels biorefinery



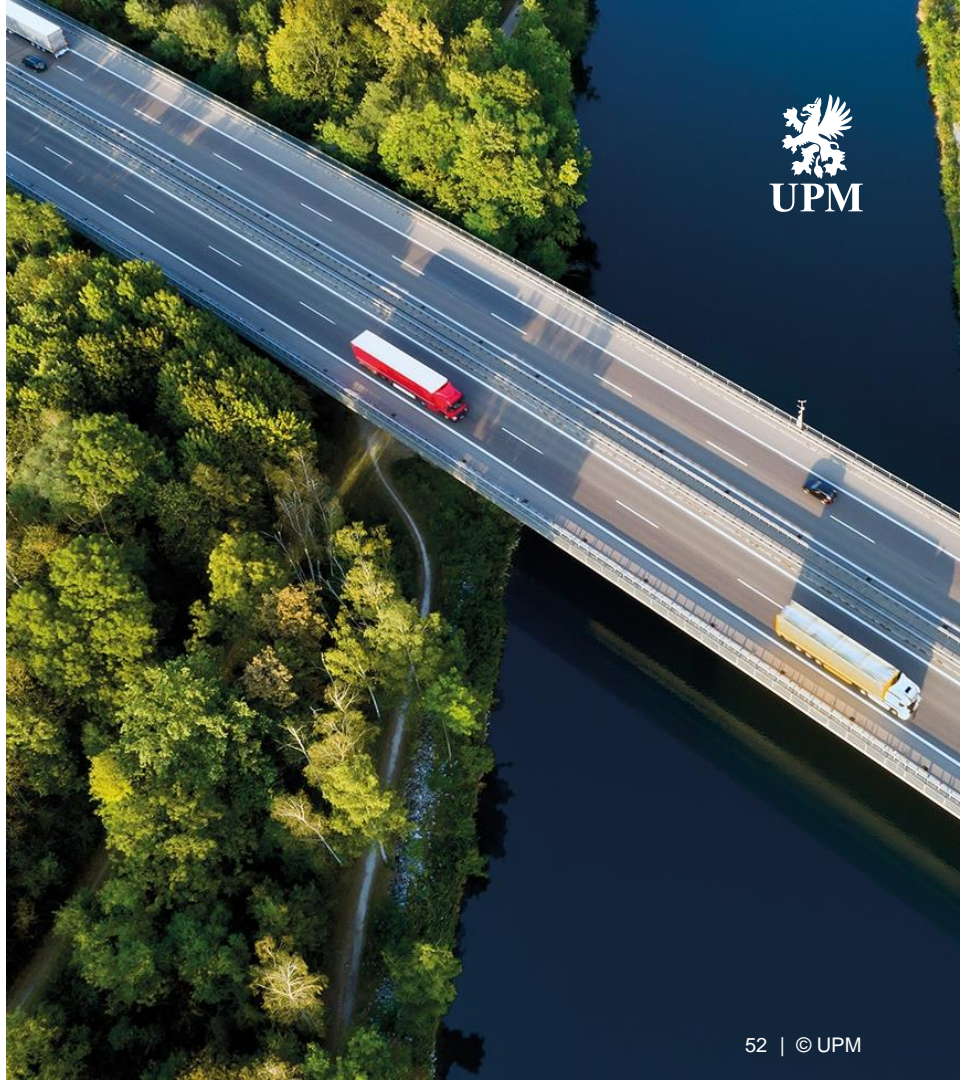
Products would significantly reduce carbon footprint in the road transport and aviation



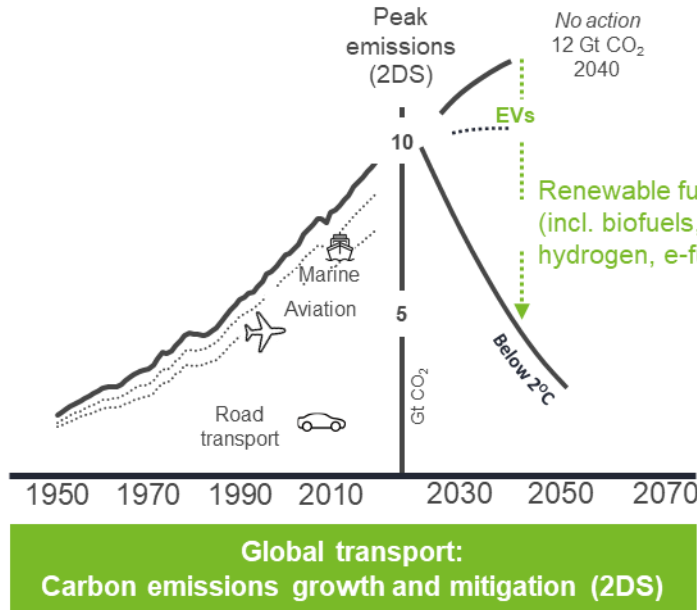
Capacity would be 500,000t of renewable fuels incl. sustainable jet fuel



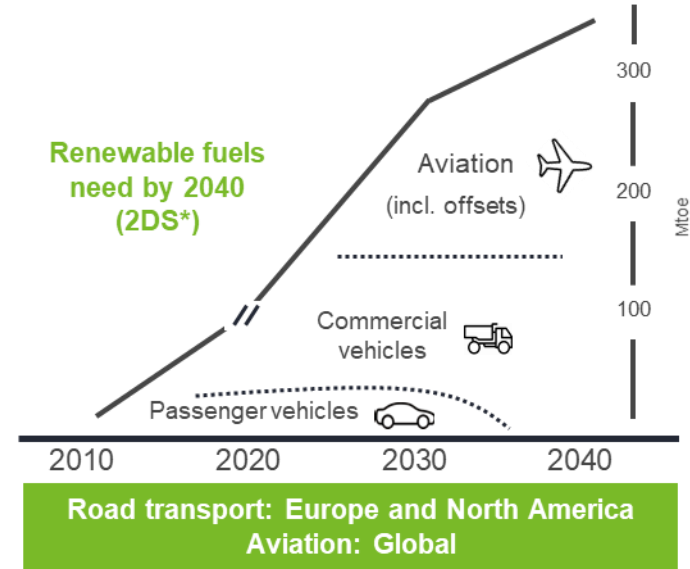
Potential investment in Rotterdam, the Netherlands



Carbon mitigation in transport is dependent on renewable fuels despite recent decline in fuel consumption



Source: UPM based on IEA, EIA, Bloomberg



*The two degree scenario (2DS) is calculated vs. 2005 reference per sector (-30% 2030, -40% 2040, -50% 2050)

Source: UPM based on WoodMackenzie, Bloomberg, ICAO, EIA

UPM Biofuels' competitive edge to be built on resilient ecosystem and agility to select markets



NEW SUSTAINABLE BIOMASS

Sustainable and uniquely upstream integrated feedstock pool

- Additionality
- Climate positive land use



Carbon stored to soil in each cycle

CLIMATE-POSITIVE FUELS

Efficient carbon neutral production



Cellulosic fuels

Renewable diesel, gasoline and jet

E-fuels future potential

DECARBONIZED TRANSPORT AND PETROCHEMICALS

Flexibility to create maximum value from several end uses and market geographies



UPM and hydrogen – growth opportunities in large-scale green hydrogen solutions

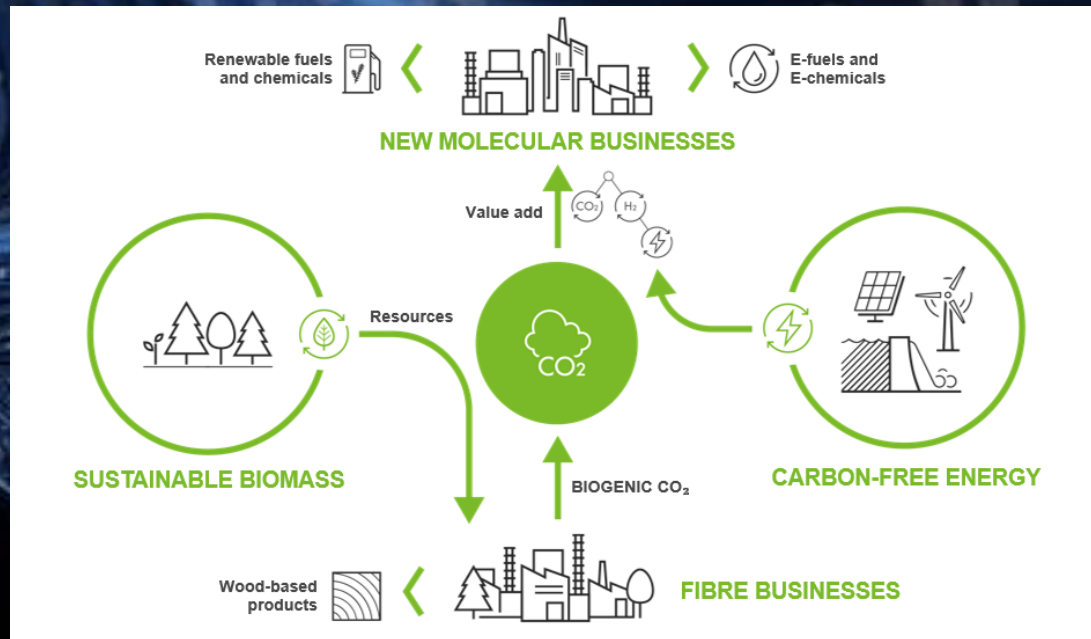


Decarbonisation will require synthetic fuels and new low-emission electricity generation

- demand for e-fuels will be driven by regulation and EU's target to decrease dependency on Russian fossil fuels

UPM has competitive advantage

- experience and in-depth knowledge on energy markets
- decarbonisation and energy optimization tools and skills
- experience on biorefinery operations
- available biogenic CO₂ needed in the production of some e-fuels



UPM **BIOFORE**
BEYOND FOSSILS

