

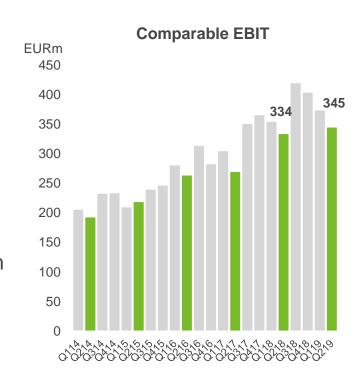
UPM Half Year Financial Report 2019

Jussi Pesonen
President and CEO
23 July 2019



Q2 2019: 25th consecutive quarter of earnings growth

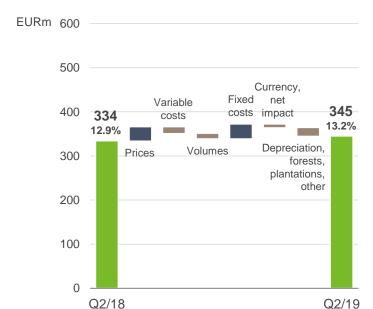
- Sales grew by 1% to EUR 2,605 million (2,589 million in Q2 2018)
- Comparable EBIT increased by 3% to EUR 345m (334m)
- Margins continued on good level, having a favourable impact on earnings
- Operating cash flow was strong at EUR 436m (328m)
- Net debt decreased to EUR 366m (401m)



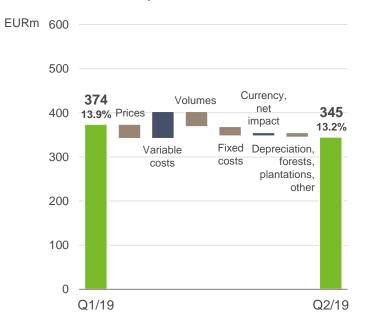
Comparable EBIT in Q2 2019



Sales prices higher, outweighing the impact of increased variable costs. Fixed costs lower, mainly due to less maintenance activity.

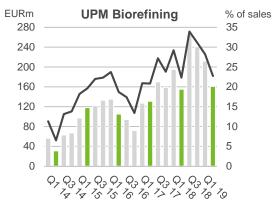


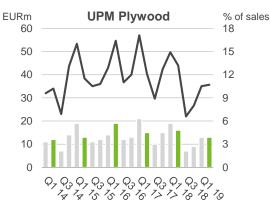
Variable costs decreased more than sales prices. Fixed costs higher and deliveries lower, mainly due to seasonal factors.

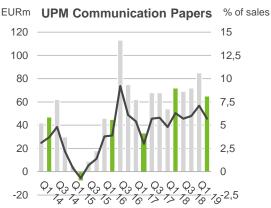


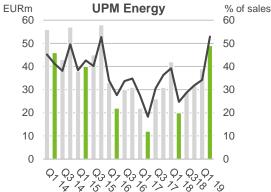
Comparable EBIT by business area

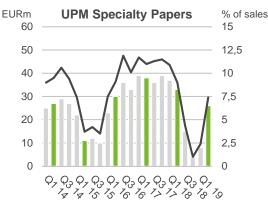


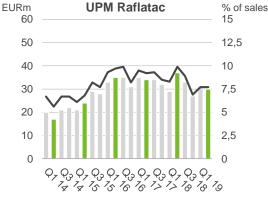






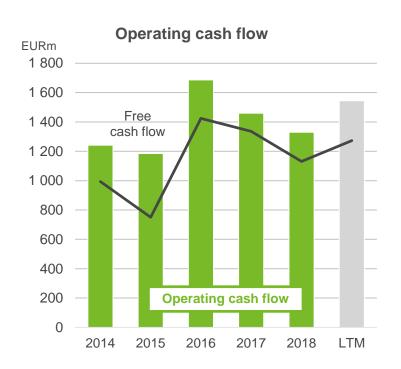






Consistently strong cash flow





- Q2/19 operating cash flow was EUR 436m (328m in Q2/18)
- Working capital decreased by EUR 48m (increased by 20m)
- H1/19 operating cash flow was EUR 756m (542m)

Outlook for 2019



The global economic growth is estimated to continue in 2019, albeit at a slower pace than in 2018. There are, however, significant uncertainties related to this, including trade negotiations between China and the US, growth in China, the undefined nature of Brexit and political uncertainties in several countries. These issues may have an impact on the global economic growth and on UPM's product and raw material markets during 2019.

UPM reached record earnings in 2018. UPM's business performance is expected to continue at a good level in 2019.

In 2019, demand growth is expected to continue for most UPM businesses, albeit at a modest pace. Demand decline is expected to continue for UPM Communication Papers.

In H2 2019, pulp prices globally are expected to be lower than in H1 2019. Paper prices in Europe and North America are expected to be moderately lower. Also input costs are expected to decrease in H2 2019 compared with H1 2019. UPM will continue measures to reduce both variable and fixed costs.

Fair value increases of forest assets are not expected to contribute materially to comparable EBIT in 2019.





Spearheads for growth



UPM invests in a world class pulp mill in Uruguay



- UPM will construct a competitive new pulp mill with annual production capacity of 2.1 million tonnes of eucalyptus pulp
- Mill investment of USD 2.7 billion
- Investments in port operations in Montevideo, local facilities in Paso de los Toros of USD 350 million
- Scheduled start-up in H2 2022
- Located in the department of Durazno on the southern side of Rio Negro, close to the town of Paso de los Toros

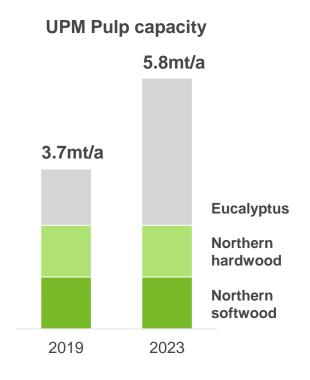




Transformative step in UPM's pulp business and in UPM's future earnings



- Significant step for UPM's future earnings
 - Expected cash cost level of USD 280 per delivered tonne of pulp(* – one of the most competitive mills in the world
 - 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
 - +57% in pulp business size in a sustainable and highly competitive way
 - UPM becomes one of the most competitive suppliers of premium pulp in the world



^{*)} including variable and fixed costs of plantation operations, wood sourcing, mill operations and logistics delivered to the main markets



Robust long-term demand outlook for pulp

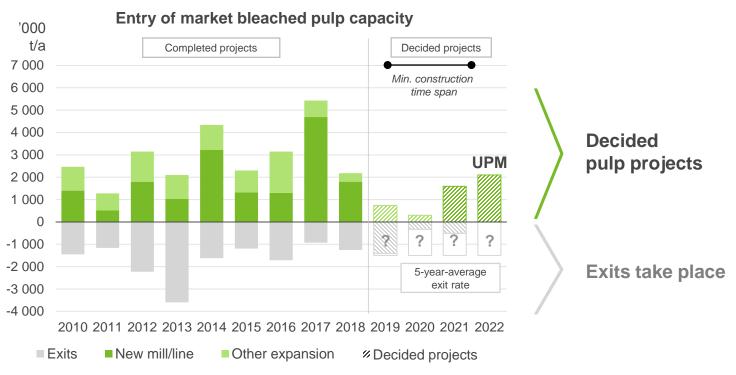


- Global consumer megatrends drive demand growth for tissue, hygiene, packaging and specialty papers.
- The annual trend growth of global market pulp demand is estimated to be about 3%.





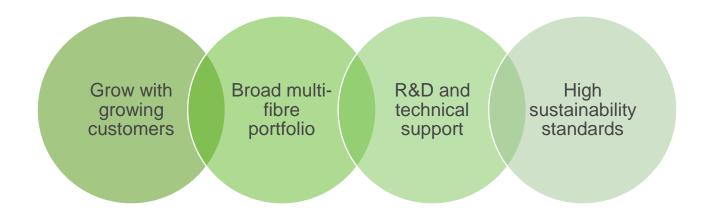
Few decided projects coming on stream in the short-term



Note: including BHKP, BSKP, PG-sulfites and non-wood grades, excluding fluff and dissolving

UPM Pulp commercial strategy







Competitive wood supply



- Eucalyptus availability secured through UPM's own and leased plantations and wood sourcing agreements with private partners
- Today UPM's own and leased plantations in Uruguay cover 382,000 hectares, supplying both UPM Fray Bentos and the new mill near Paso de los Toros
- 30 years experience of sustainably managed and productive plantations



State of the art mill design



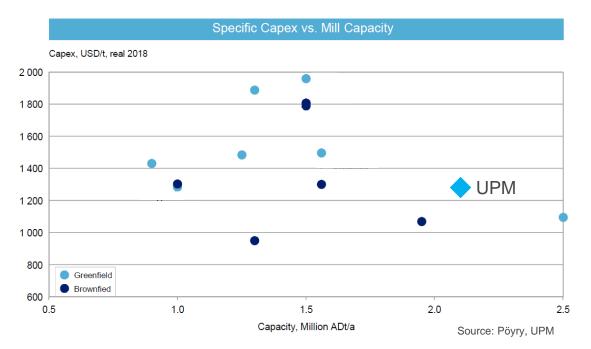
- Initial production capacity of 2.1 million tonnes of eucalyptus pulp, with further potential
- Mill investment USD 2.7 billion, efficient investment level compared with corresponding projects
- World-class single line pulp mill and Best Available Techniques (BAT)
 - Excellent safety
 - Proven high environmental performance
 - High availability and maintainability
 - High energy output, surplus renewable electricity 110 MW
 - Low costs







The weighted average investment cost for the selected projects has been 1420 USD/t in real 2018 terms

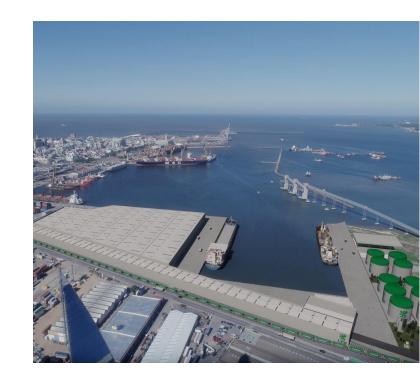


UPM's new mill USD 1,286 per tonne

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 has been signed, financing is being finalised
- Agreed road improvements



Community investments



- UPM will invest in a new residential area. in Paso de los Toros and provide temporary housing for the project personnel
- UPM will also fund the improvement of municipal waste water treatment plant and restoration of the municipal landfill in Paso de los Toros
- Total local investments USD 70 million



Project schedule and capital outflow



- The necessary permits have been granted and the material agreements with the Government of Uruguay have been concluded to the satisfaction of both parties.
- The Public-Private-Partnership agreement between the government and the construction company for the construction of the central railway was signed in May 2019 and the financing of the construction company is being finalised.
- Among other project preparations, the site works for the mill and dredging of the port are commencing immediately. The tendering for the main equipment and manning of the project is ongoing. Commitments on major capital outlays will be made in line with the railway financing and execution.
- The mill is expected to start up in H2 2022.
- The main part of the total capital expenditure of USD 3 billion will take place in 2020–2022. UPM will have 91% ownership in the project and a local long-time partner which has been involved also in UPM Fray Bentos is owning 9%.



- Margin management delivered continued earnings growth Q2 2019 was the 25th consecutive quarter of earnings growth
- UPM's business performance is expected to continue at a good level in 2019.
- UPM invests in a world class pulp in Uruguay, resulting in a step change in the scale of UPM' pulp business, and in UPM's future earnings
- One of the most competitive mills in the world, which enables attractive returns for the investment in various market scenarios
- Industry-leading safety and sustainability performance of the mill



Uruguay

In South America in

- Democracy
- Peace
- Low corruption
- Press freedom
- Prosperity

3.4 million people

1.3 million in Montevideo

The 2nd smallest

nation in South America (176,000 km2)

One of the most socially advanced countries with a well organised social system

The #3 globally in e-participation

In South America in

- Economic freedom
- Income equality
- Per-capita income
- Inflows of foreign direct investments



In South America in

Human development index

ARGENTINA

- GDP growth
- Innovation and infrastructure



UPM in Uruguay



UPM employs through the whole supply chain altogether **7,000** people and its contribution to Uruguay's GDP is **1.4%** (*



382 000 ha of own and leased eucalyptys plantations

Solid raw material base extending beyond the existing pulp production



UPM Fray Bentos pulp mill started operations in 2007 with excellent safety, environmental and production performance

Capacity of 1.3 million tonnes/year of eucalyptus pulp

8% share of Uruguay's energy production



UPM Foundation promotes development in rural communities through education, training and entrepreneurship

Joint work with local stakeholders

*) Sources: Economic Impact study of UPM's Operations in Uruguay by CPA Ferrere, May 2016, and Economic impact study of current and future operations of UPM in Uruguay by Deloitte, July 2019

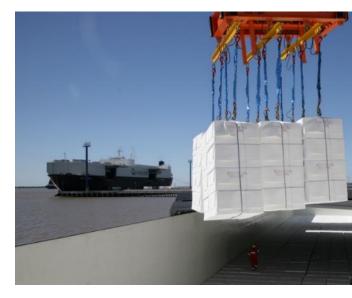


Positive impacts of the new pulp mill in Uruguay

+ 10,000 additional permanent direct and indirect jobs

Permanent expected increase of over. + 2% of GDP

- + 12% increase in exports for the country
- + MUSD 170 tax collection and + MUSD 200 in salaries through the value chain per year
- + 600 small and medium sized local enterprises



Sources: Economic Impact study of UPM's Operations in Uruguay by CPA Ferrere, May 2016, and Economic impact study of current and future operations of UPM in Uruguay by Deloitte, July 2019



Focus on responsibility



Well-established forestry legislation



- Forest law established 30 years ago to develop forest industry
- Clear land ownership structure and strict policies defining land use
- Native forests cover 5% of surface and are all protected
- No rainforests Uruguay's vegetation type is pampa
- Tree plantations are established mainly on old cattle grazing land



Sustainable eucalyptus plantations



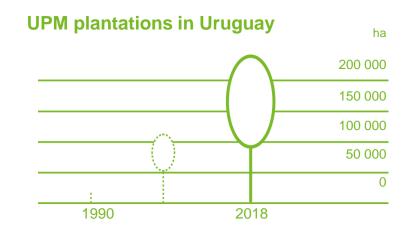
- Plantations cover 6% of Uruguay's total surface 176,000 km².
- All UPM eucalyptus plantations are FSC® and PEFC™certified
- UPM is a founding member in the WWF driven **New Generation Plantations Project (NGPP) that** looks for best practises on sustainable tree plantations
- Groundwater levels and their recharge cycles are stable - proven by studies with universities and independent researchers



Development of plantations and CO2 storage



- How the CO₂ storage in Uruguayan plantations has developed over the years, including UPM's own and leased plantations
- A new 40M tonne carbon storage in 25 years:
 - With no effect on food production or natural forests – plantations established on former grasslands



UPM promotes diverse use of land in cooperation with local landowners, communities and residents



Grazing **160,000** cows

Beekeeping
180
honey producers

Mushroom collection120registered collectors

open to local communities









Figures in UPM land and UPM managed plantations

UPM's environmental performance in Uruguay



- Fray Bentos has high environmental performance and is the most monitored pulp mill with the strictest environmental permit levels in the world – its performance is proven by several studies
- The mill is monitored by UPM, the Uruguayan environmental authority as well as the Scientific Committee on behalf of the Administrative Commission for the Uruguay River
- Monitoring results are transparently reported by UPM and the authority on their websites since the start of operations



Rio Negro river



- The planned new pulp would use water of Rio Negro, the main river in the interior of Uruguay
- Available data from local environmental studies indicates that nutrient load to the river has grown rapidly and the state of water quality is getting worse.
- Improving the quality of the water requires actions from all riverside stakeholders
- Minimum flow rate for dams will impact positively to Rio Negro water quality and the biology of the river
- Average flow: 650 m³/s at Paso de los Toros versus Vuoksi river 600 m³/s in Southeast Finland with several pulp and paper mills along the water course.



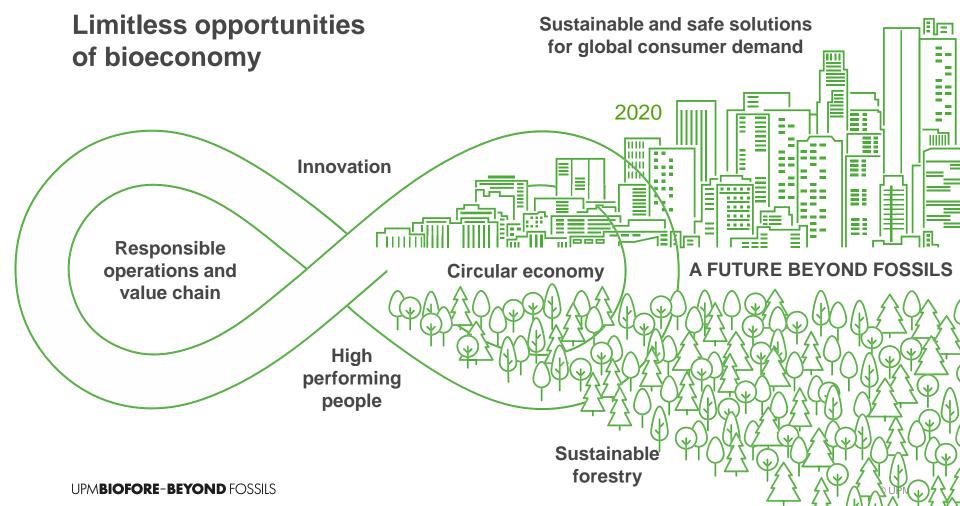
Image: Rio Negro and the new pulp mill location

Free trade zones



- FTZ is one of the tools used by the State of Uruguay to attract foreign investments to the country
- Currently 11 FTZ areas in Uruguay with 1,560 companies which employ over 16,000 people and create over 30% of the country's exports.
- The companies in these zones are from industrial, commercial, logistics, services or mixed sectors.
- The planned new pulp mill would operate in a FTZ, just like the Fray Bentos mill.
- UPM pays taxes based on the local taxation on all operations outside of the FTZ – nurseries, plantations, harvesting, logistics, transportation, ports.

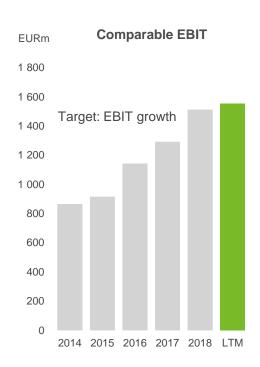


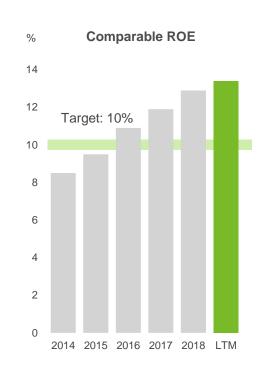


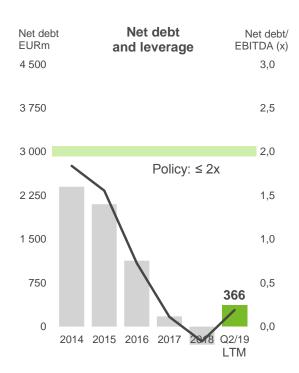
UPMBIOFORE BEYOND FOSSILS

Group financial performance



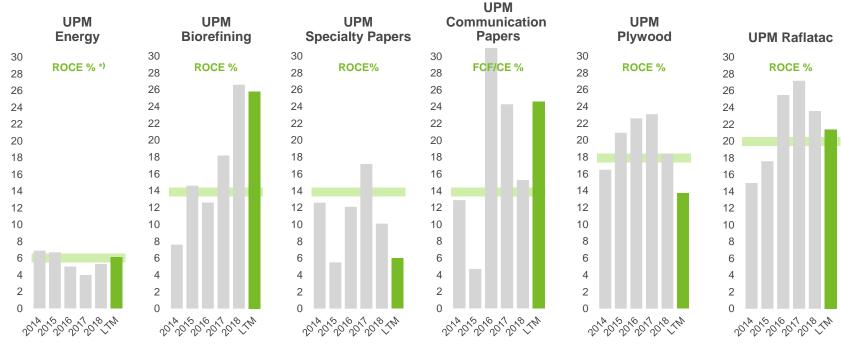






Business area returns and long-term targets





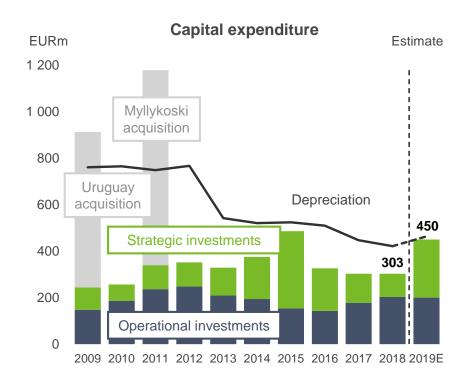
^{*)} shareholdings in UPM Energy valued at fair value

UPMBIOFORE-BEYOND FOSSILS

Long-term return target

Low investment needs in existing assets allow growth projects with modest total capex





Focused growth investments

- High returns and fast payback
- Low implementation risk
- ✓ Financed from operating cash flow

Low replacement investments

- Asset quality in all businesses, e.g. large competitive pulp mills
- ✓ UPM Communication Papers
- Modest total capex and attractive returns





Significant maintenance shutdowns in 2018 and 2019

Timing	Unit
Q2 18	Fray Bentos pulp mill Kaukas pulp mill Lappeenranta biorefinery turnaround Olkiluoto nuclear power plant
Q4 18	Pietarsaari pulp mill
Q2 19	Kymi pulp mill Olkiluoto nuclear power plant
Q4 19	Fray Bentos pulp mill

Maintenance shutdowns have an impact on

- Maintenance costs
- Production volumes
- Operational efficiency

UPM's main currency exposures



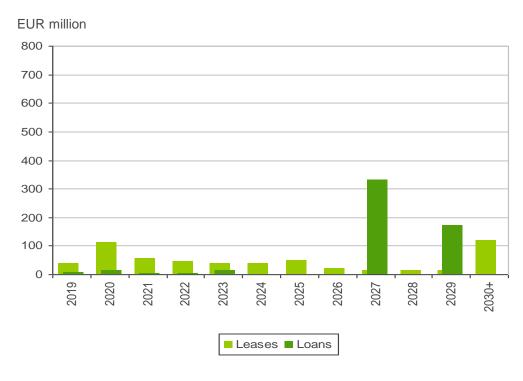
- Key currency exposures USD, GBP and JPY
- Policy to hedge an average of 50% of the estimated net currency cash flow for the next 12 months

Estimated annual foreign currency net cash flow, before hedging

	USD	GBP	JPY	Others
EURm	1,220	270	230	280

Maturity profile and liquidity





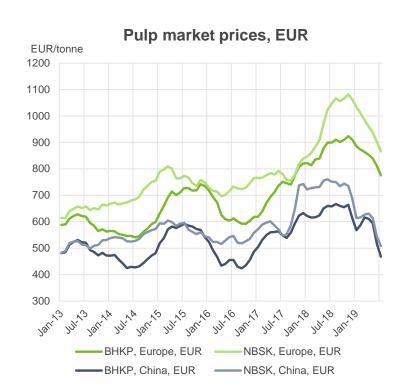
Liquidity on 30 June 2019 was EUR 0.7bn

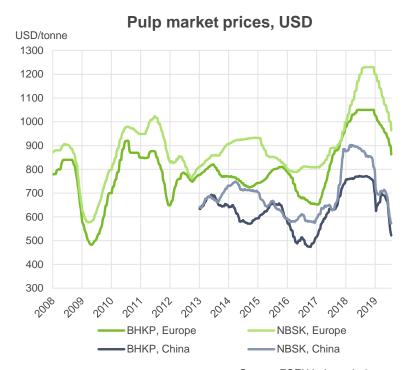
UPM has bilateral committed facility EUR 6.5 million related to joint operations maturing 2020.

UPM Biorefining

Chemical pulp market prices



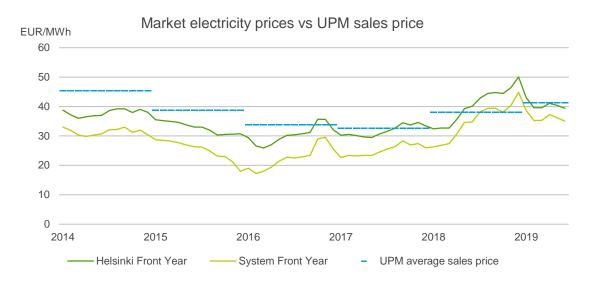




Source: FOEX Indexes Ltd

Cost efficient generation enables robust profitability in changing market environment





UPM Energy profitability	2014	2015	2016	2017	2018	H1/19
Comparable EBIT, EURm	202	181	116	91	123	88
% of sales	43.5	43.6	32.7	28.8	31.5	42.6

UPM Communication Papers

Graphic paper prices







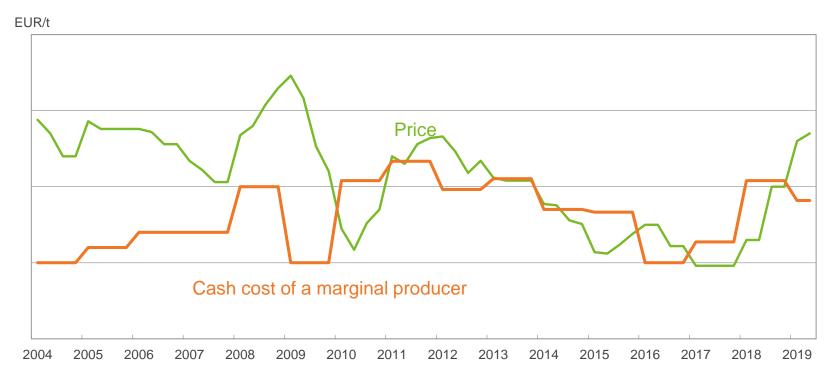


Sources: PPI, RISI

UPM Communication Papers

Paper price vs. cash cost of marginal cost producer





Sources: PPI, RISI, Pöyry

UPMBIOFORE BEYOND FOSSILS