

SAP Commodity Risk Management

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SAP, PWC and Customers Only



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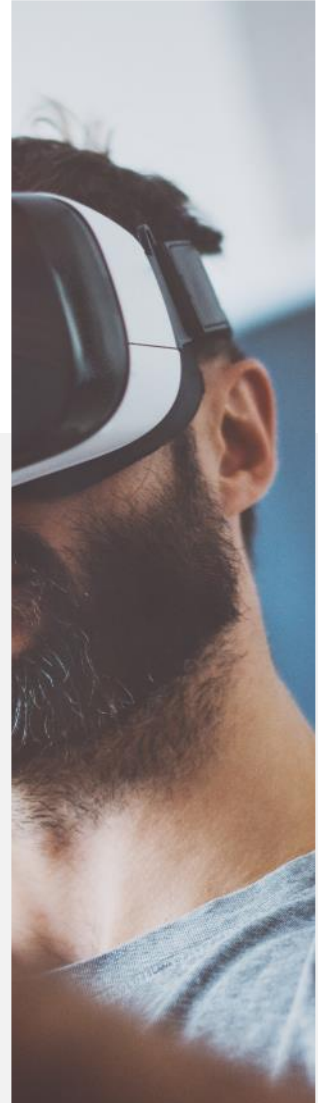
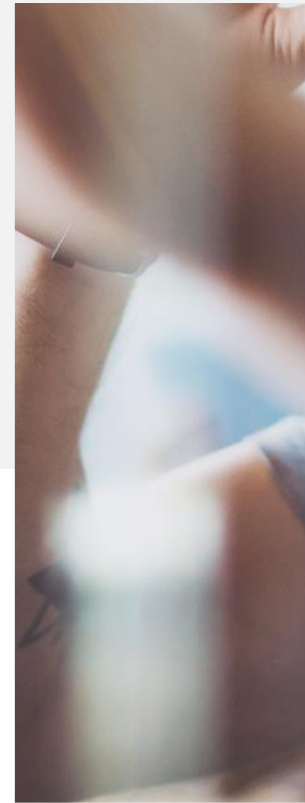
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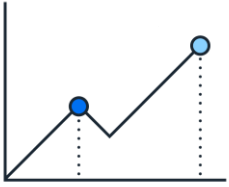
01

Solution Overview Commodity Risk Management

SAP



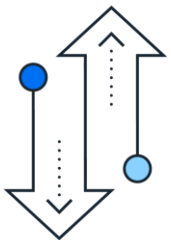
Why ?



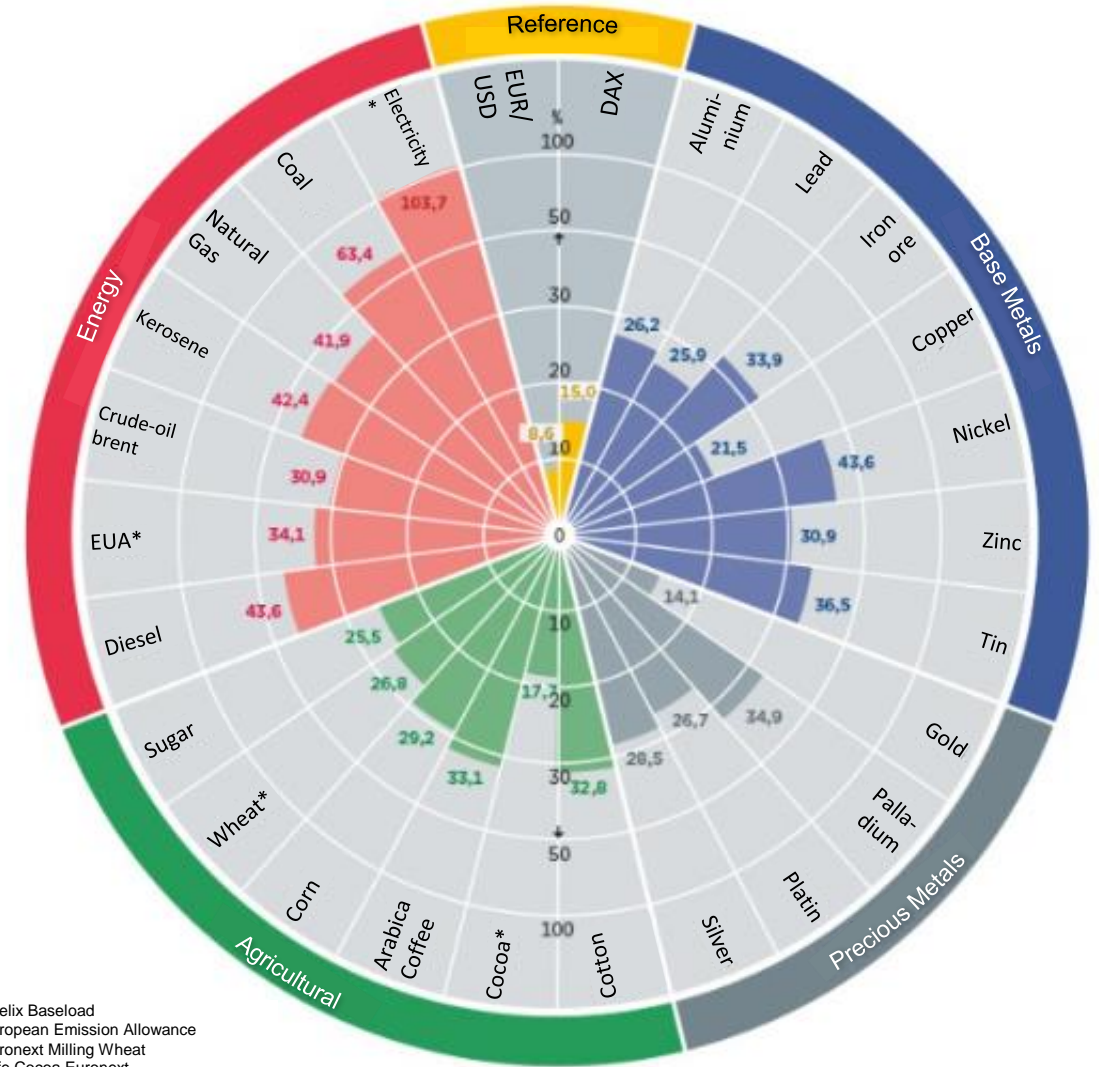
**Huge Commodity Price
Risk volatility**



**Unpredictable material
costs**



**Unstable operating
margins**



* Phelix Baseload
* European Emission Allowance
* Euronext Milling Wheat
* Liffe Cocoa Euronext

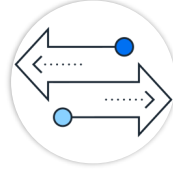
Target industries

Customer profile

Commodity Producers



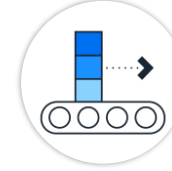
Commodity Traders



Commodity Converters



Commodity Consumers



Commodity categories



Energy

- Crude Oil, Fuels, Natural Gas, LNG
- Refined Products and Chemicals
- Power



Metals and Mining

- Base Metals – Copper, Zinc, Nickel, Lead, Iron, Aluminum
- Precious Metals – Gold, Silver, Platinum
- Concentrates



Others

- Freight
- Packaging Materials
- Co2 Certificates (EUAs)



Dairy and Livestock

- Milk
- Butter
- Cheese
- Cattle
- Fish



Grains and oil seeds

- Corn
- Wheat
- Soybeans, Soybean Oil, Soybean Meal
- Palm Kernels and Crude Palm Oil

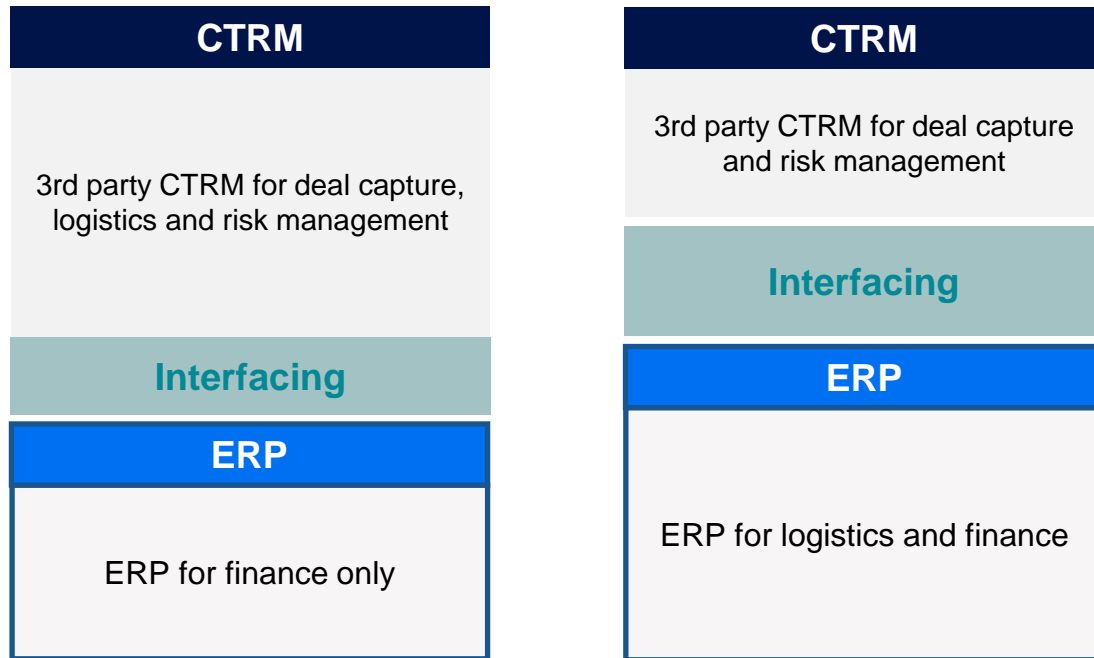


Soft commodities

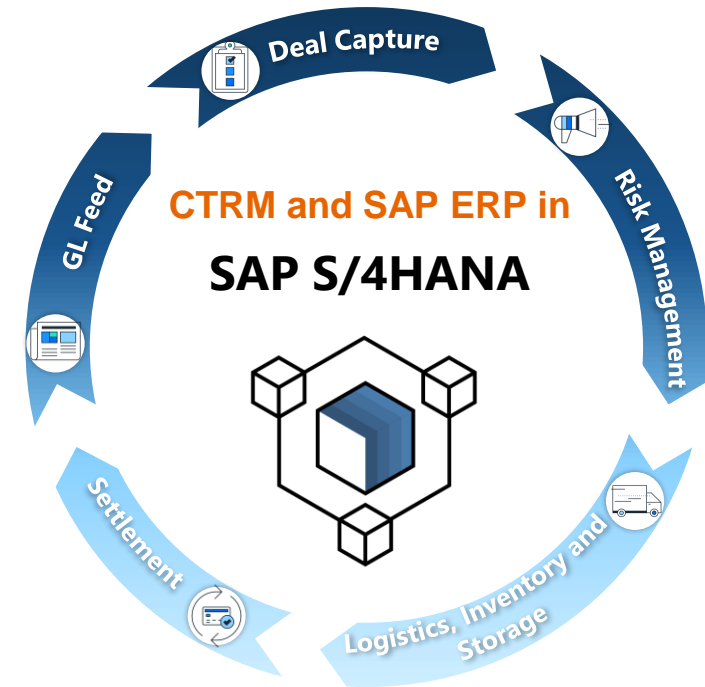
- Coffee
- Cocoa
- Sugar
- Cotton

Moving customers to a unified innovation platform

Traditional CTRM systems (Outdated approach)



Next-generation Architectural Paradigm for CTRM (*Real-time is the new Reality*)



Limited integration and end-to-end visibility



Complex, expensive interfacing



Limited potential to leverage new SAP technologies



Single instance with fully integrated, comprehensive processes

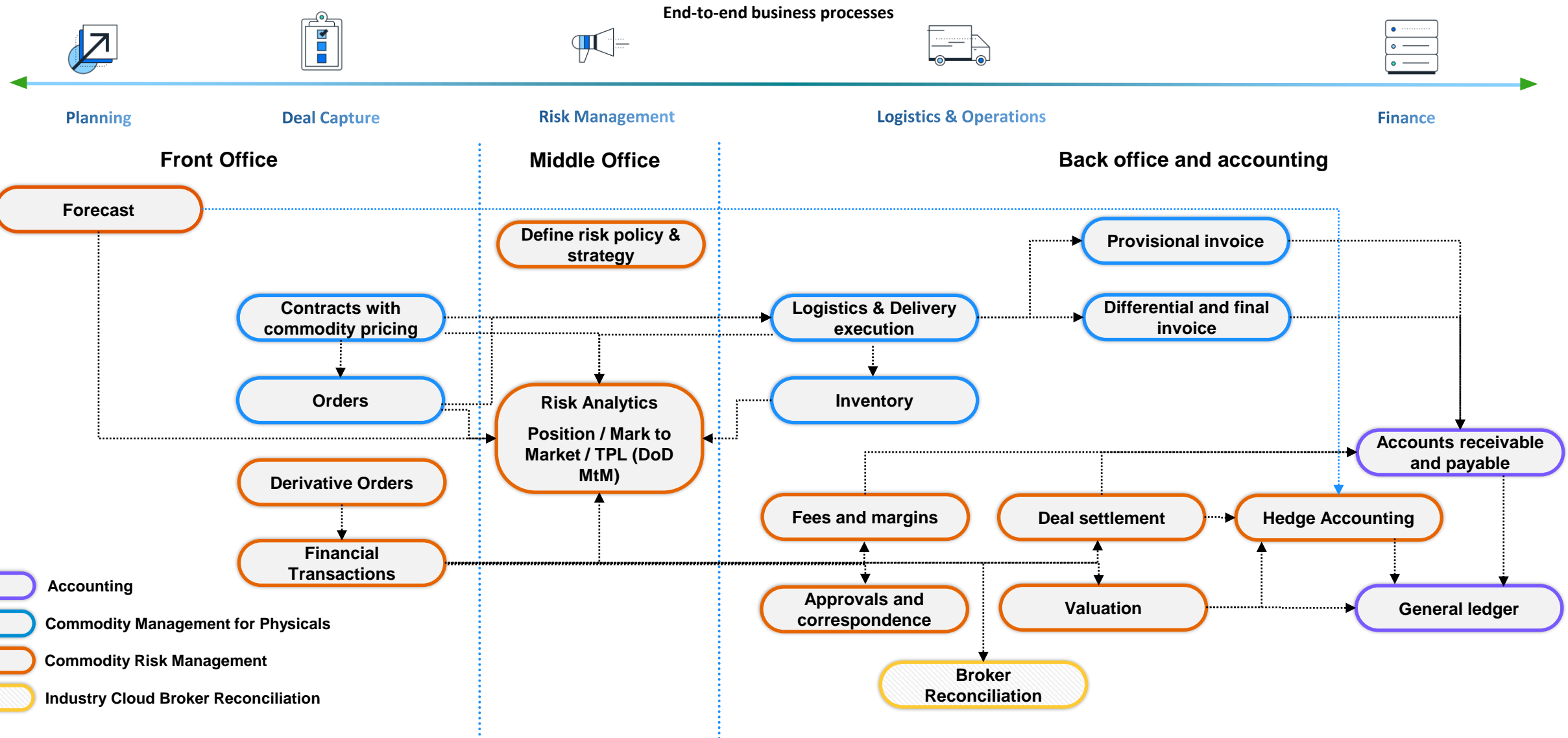


SAP Commodity Management as part of the Intelligent Enterprise

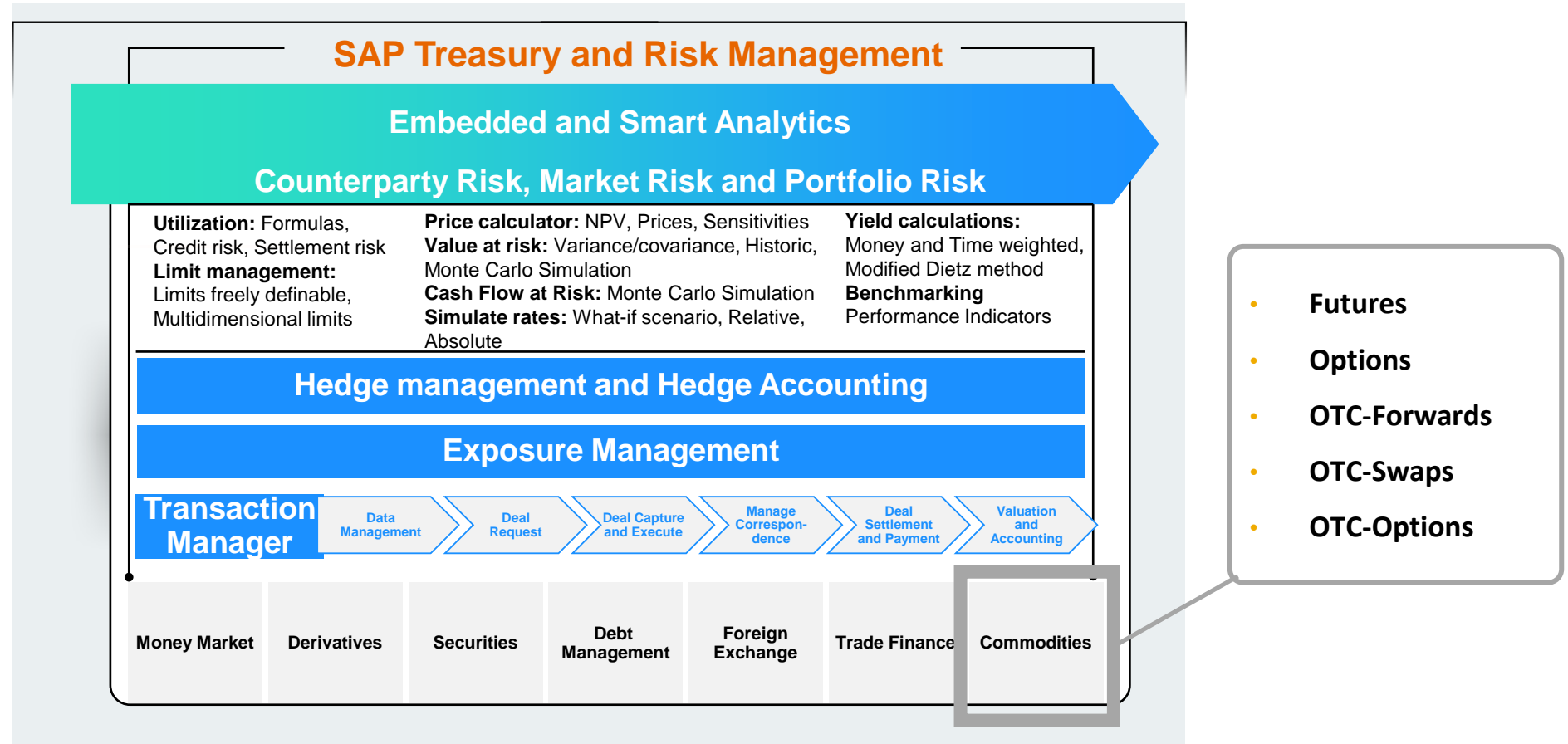


Future-proof Technology stack

SAP Commodity Risk Management – integrated deployment with logistics



Comprehensive Solution for Treasury and Commodity Risk Management



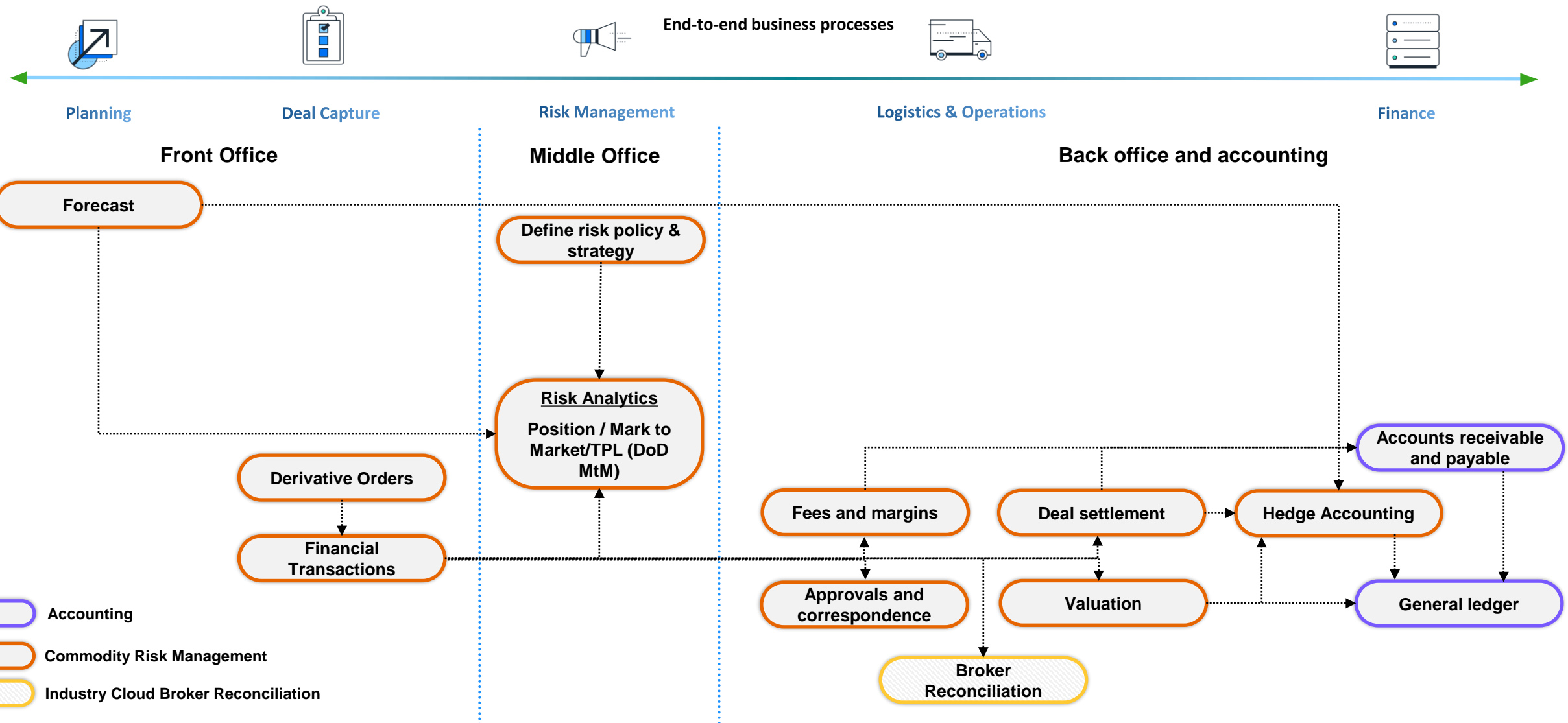
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02

Context for Commodity Consuming Companies



SAP Commodity Risk Management – deployment at Commodity Consumers



Stakeholder needs in the context of Commodity Hedging

The Need

The solution



- Run a reliable and auditable price risk exposures management with a flawless process execution control
- Establish a connected process that aligns seamlessly with the rest of the treasury operations.

Head of Treasury



- Monitor current exposures, target hedge ratios and existing hedges to quickly understand where and which additional hedges are to be concluded

Derivative Traders



- Predictable P&L achieved by price risk hedging activities
- Minimize P&L volatility caused by hedging derivative valuations
- Harmonized reporting for consolidated view

CFO

Efficient tools to manage exposures and hedges by financial derivatives and as optional functionality apply hedge accounting

User-friendly cockpits for swift understanding of where and what is supposed to be hedged and efficient capture of concluded hedges

The ability to apply Commodity Price Risk Cash Flow Hedge Accounting as “optional” accounting treatment

Functionality to manage Exposures and Derivatives
Process controls and workflows
Process automation
Versioning and audit trails
Flexible accounting integration
Minimized administrative overhead

Exposures structuring and grouping
Hedge quotas management
Provide tools for planning & capturing hedge execution plans
Hedge cockpits for overview and drilldown
Fast trade capture screens with minimal input

Hedge relationships management functionality
Defined Hedge Accounting rules compliant
Accurate hedge accounting values and key figures
Auditable documentation
Flexible integration for complex automated postings
Easy to consume seamless reporting functionality

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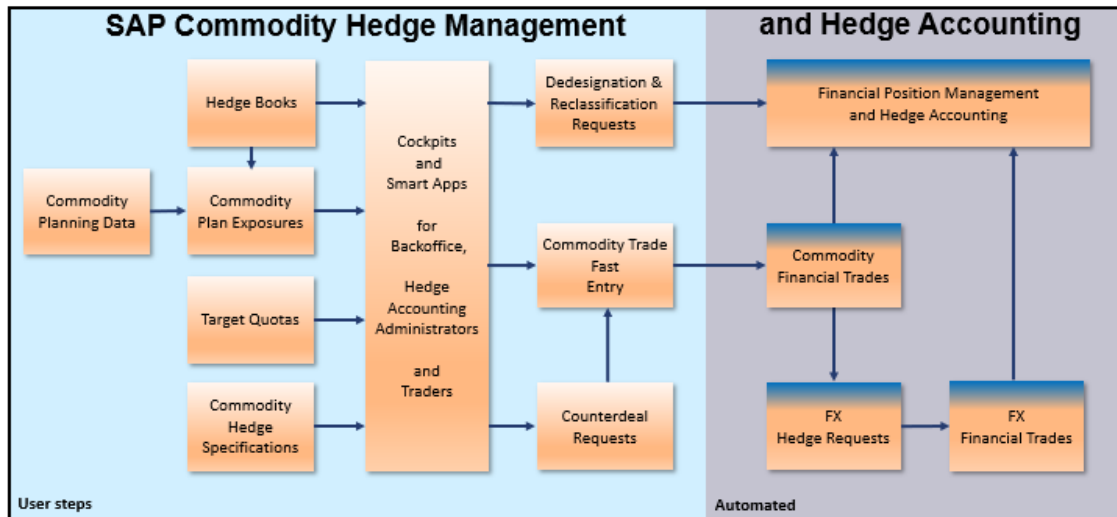
Hedge Management and Hedge Accounting



SAP Commodity Hedge Management & Hedge Accounting

Capabilities

- **Management of Planning Data, Exposures, Hedge Limits, Hedge Books, Hedge Execution plans** (Hedge Specifications)
- **Fiori Apps for Backoffice and Hedge Accounting administrators** to facilitate their tasks
- **System identified exceptions** to support end users to trigger required actions
- **Hedge Cockpit for Derivative Traders**
- **Automated designations**
- **Full support and automation for Hedging-on-Behalf** scenarios
- **Trigger Hedging** and **Hedge Accounting for FX risks** embedded in Commodity Hedges
- **Cash Flow Hedge Accounting for Commodity Price Risks** according to IFRS9



Generic Benefits

- ✓ **Highly automated processes** minimize Hedge Accounting related workload
- ✓ **Improved visibility and auditable transparency** through audit-proof process documentation
- ✓ **Seamless integration** with SAP Treasury and Risk Management

SAP Commodity Price Risk Hedge Management and Hedge Accounting (IFRS9)

Process flow for hedging...



Hedging Area and Hedge Book Definition

The Hedging area defines general settings for Hedge Management and Hedge Accounting.

Hedge Books structure and group the exposures by similar risk characteristics regarding price risks (pricing period length, Commodity [DCS]), delivery period length and logic.



Capture Target Quotas

Maintain target quotas for Hedge Management and Hedge Accounting.



Get and manage Forecasts

Import planning data by API or excel template, enrich and transfer into Exposures. Release new exposures version to become risk management relevant.



Plan hedge execution (Optional)

Capture hedge execution plans (Hedge Specifications) on Hedge Book and Period level to document the planned hedging activities (which hedging % shall be achieved under specific market conditions).



Execute Hedging with Hedge Cockpit or Traders Order Cockpit

Use the cockpits to quickly understand for which Hedge Books and Exposures additional hedges need to be concluded.

Conclude the hedges with counterparties and use fast trade capture screen to create and assign the hedging transaction to the exposure.

Trigger automatic FX Hedge Request – where applicable.



Greater visibility

Better decision making

Know why, how and what's next for your Managed Risk

Reduced audit time

Seamless integration with SAP Treasury operations

SAP Commodity Price Risk Hedge Management and Hedge Accounting (IFRS9)

...embedded with automatic process flow for hedge accounting

Automated designation process

A Hedging Relationship is automatically created in status 'Planned Designation' with the creation of the deal transaction; Designation is to be released with the availability of market rates during End-of-Day processing. Designations are synchronized across all involved derivatives in case of Hedging-on-Behalf scenarios.

Period end Close

Valuation of the derivative and classification of hedging relationship is executed after the calculation of net present values (NPV).

Premature designation or Reclassification De-

In case of over-hedging situations, premature de-designations or reclassifications can be executed based on de-designation or reclassification request. Triggered by one request for all derivatives involved in Hedging-on-Behalf scenarios

Basis Adjustments or OCI reclassification in delivery period

Defer the realized gains and losses from the derivative's final financial settlement in OCI until the delivery period starts. Consume this deferred amount by basis adjustment or OCI reclassification postings proportionally within the delivery period.

Reporting Accounting Hedge

Report on details of hedge accounting values and key figures by key date based CDS queries, able to be deployed in SAC or other BI or Frontend Reporting tools as e.g. SAP Analysis for MS Office.

Automation level <ul style="list-style-type: none">100%	Automation level <ul style="list-style-type: none">100%	Automation level <ul style="list-style-type: none">100% after activity is triggered	Automation level <ul style="list-style-type: none">Up to 100%	Fast, accurate and detailed view on all aspects and values in context of Hedge Accounting related values and key figures.
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04

More Info and Q&A



Q&A



Additional Information



[Product Roadmap](#)
[Commodity](#)
[Management](#)



[SAP Commodity Management Info](#)
[SAP Commodity Price Risk Hedge](#)
[Accounting Info](#)



[Commodity Management](#)
[Product Page](#)
[Video Channel](#)



[Microsite O&G](#)
[Microsite Agriculture/CP](#)
[Microsite Metals & Mining](#)

Thank you.

Contact information:

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How does it looks like ?

Planning Data

Commodity Planning Data

Manage Planning Data

Manage Planning Data



New and Unreleased

Manage Planning Data



Erroneous

Display Planning Data Upload Logs

- Import Planning Data by Excel or API
- Minimal information required
- Release process

<

SAP

Manage Planning Data ▾

All ▾ Search

ⓘ ⚙ OL

Standard ▾

Search

Planning Data ID:

Company:

Commodity:

Valid-From Date:

Created By:

LENZ

Upload Timestamp:

Status:

Released x

Go Adapt Filters (2)

Planning Data Overview (8) Standard ▾

Submit For Release Release Reject Set Status To ▾ Get Planning Data ▾ Delete ⚙

Selected Items - 0

<input type="checkbox"/>	Planning Data ID	Company	Commod...	External Hedge Book	Valid-From ...	Delivery Category	Delivery Year	Delivery Start Date	Delivery End Date	Pricing Start Date	Pricing End Date	Plan Quantity	Buy or Sell	Version No.	Status	
<input type="checkbox"/>	4602	0001 (SAP SE)	Aluminium	ZT_AL1M_NH	01.04.2023	M1 (January)	2024	01.01.2024	31.01.2024	01.01.2024	31.01.2024	1,002,000	TO Buy	1/1	Released	>
<input type="checkbox"/>	4603	0001 (SAP SE)	Aluminium	ZT_AL1M_NH	01.04.2023	M2 (February)	2024	01.02.2024	29.02.2024	01.01.2024	29.02.2024	1,002,000	TO Buy	1/1	Released	>
<input type="checkbox"/>	4607	3000 (IDES AG QAT)	Aluminium	ZTST_AL101	03.01.2022	M1 (January)	2024	01.01.2024	31.01.2024	01.12.2023	31.12.2023	1,000,000	TO Buy	1/1	Released	>
<input type="checkbox"/>	4608	3000 (IDES AG QAT)	Aluminium	ZTST_AL101	08.05.2023	M2 (February)	2024	01.02.2024	29.02.2024	01.01.2024	31.01.2024	750,000	TO Buy	3/3	Released	>
<input type="checkbox"/>	4609	3000 (IDES AG QAT)	Aluminium	ZTST_AL101	03.01.2022	M3 (March)	2024	01.03.2024	31.03.2024	01.02.2024	29.02.2024	1,000,000	TO Buy	1/1	Released	>
<input type="checkbox"/>	4610	3000 (IDES AG QAT)	Aluminium	ZTST_AL101	18.05.2023	M4 (April)	2024	01.04.2024	30.04.2024	01.03.2024	31.03.2024	1,400,000	TO Buy	6/6	Released	>
<input type="checkbox"/>	4611	3000 (IDES AG QAT)	Aluminium	ZTST_AL101	18.05.2023	M5 (May)	2024	01.05.2024	31.05.2024	01.04.2024	30.04.2024	1,600,000	TO Buy	5/5	Released	>
<input type="checkbox"/>	4612	3000 (IDES AG QAT)	Aluminium	ZTST_AL101	18.05.2023	M6 (June)	2024	01.06.2024	30.06.2024	01.05.2024	31.05.2024	1,000,000	TO Buy	5/5	Released	>

Exposure Data

Commodity Plan Exposures

Process Over-Hedged Plan Exposures

Manage Plan Exposures

Manage Plan Exposures

Manage Plan Exposures

Manage Plan Exposures

Monitor Plan Exposures

2

5
New and unreleased

4
Erroneous

2
Due Today

- Transferred from Planning Data or captured in Fiori App
- Data enrichment by Validation and Substitution tool
- Assignment to a Hedge Book
- Flag for Hedge Accounting relevance
- Release process
- Version Management

Manage Plan Exposures

All Search

Standard

Search

Plan Exposure ID:

Company:

DCS:

Hedge Book:

Delivery Period Type:

Delivery Period Year:

Status: Created x 1 More

Valid-From Date:

Go

Adapt Filters (1)

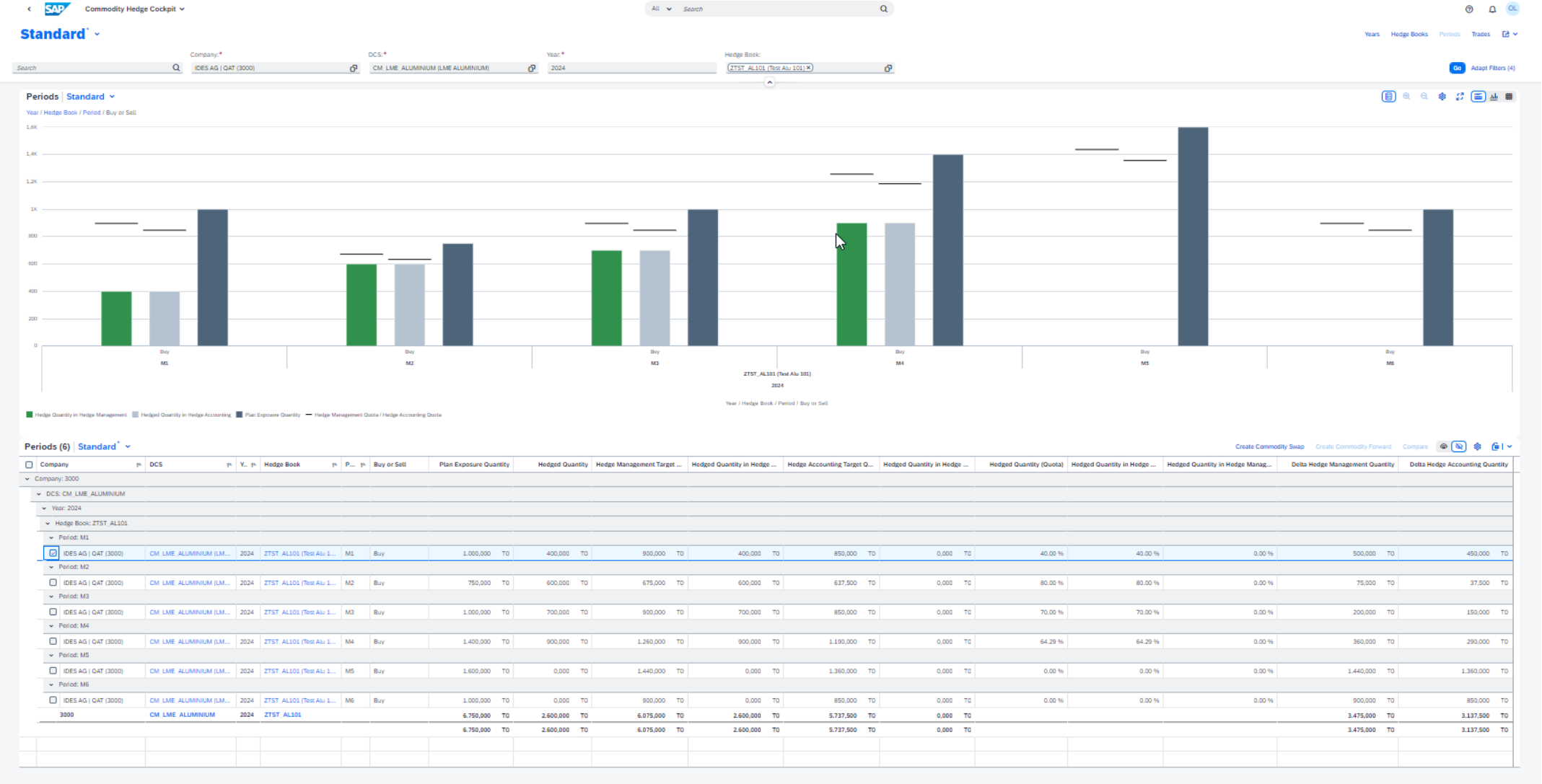
Plan Exposures (5) Standard

Submit for Release Release Reject Set Status To Create Create New Version

Selected Items - 5

<input checked="" type="checkbox"/>	Plan Exposure ID	DCS	Hedge Book	Company	Valid-From Date	Delivery Period Type	Delivery Period Year	Exposure Quantity	Difference	Version No.	Status	
<input checked="" type="checkbox"/>	19309	CM_LME_ALUMINIUM (LME ALUMINIUM)	ZT_AL1M_NH (Test ALU 1 -1 1 Non HAC)	0001 (SAP SE)	01.04.2023	M1 (January)	2024	1.002,000 TO	0,000 TO	1/1	Created	>
<input checked="" type="checkbox"/>	19310	CM_LME_ALUMINIUM (LME ALUMINIUM)	ZT_AL1M_NH (Test ALU 1 -1 1 Non HAC)	0001 (SAP SE)	01.04.2023	M2 (February)	2024	1.002,000 TO	0,000 TO	1/1	Created	>
<input checked="" type="checkbox"/>	19311	CM_LME_ALUMINIUM (LME ALUMINIUM)	MAL_3-1-3	0001 (SAP SE)	01.01.2023	Q1 (First Quarter)	2079	0,000 TO	0,000 TO	1/1	Created	>
<input checked="" type="checkbox"/>	19307	CM_LME_ALUMINIUM (LME ALUMINIUM)	ZD_AL1M_NH (Demo Alu Delivery Month Average)	3000 (IDES AG QAT)	01.01.2023	M6 (June)	2023	17.000,000 TO	0,000 TO	1/1	To be released	>
<input checked="" type="checkbox"/>	19298	CM_LME_ALUMINIUM (LME ALUMINIUM)	ZTST_AL101 (Test Alu 101)	4000 (IDES China)	31.03.2023	M8 (August)	2023	3.000,000 TO	0,000 TO	1/1	To be released	>

Hedge Cockpit (Exposures, Quotas and Trades)



Hedge Control and Hedge Requests

Fiori Apps to monitor Situations and trigger different activities (Hedge Requests)

