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Motivation for Commodity Management

SAP Solution Approach

SAP Solution Offering

Innovations incl. Demo

Customer Success

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Global trends

Their impact on commodity management

Volatility



- Customer demands are increasing.
- The balance between supply and demand continues to tighten.
- Geopolitical instability further fuels uncertainty.
- Expansion of financial markets for commodities impacts price liquidity.

Risk



- Risk management demands increased focus by top levels of executives.
- Corporate earnings are impacted by unpredictable margins.
- Availability of operating capital is constrained by global banking liquidity.

Regulation

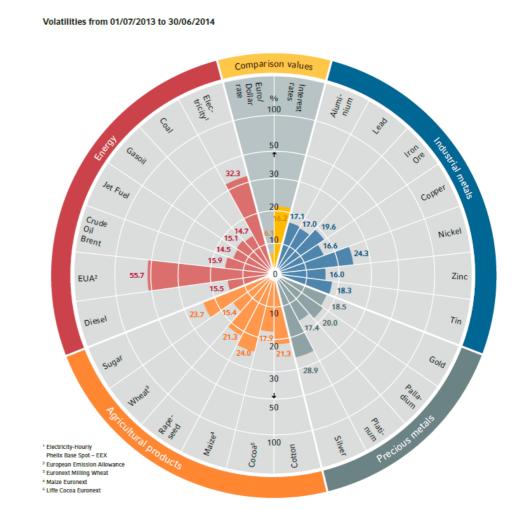


- Regulatory scrutiny is increasing and changing everywhere.
 - Accounting
 - Derivative clearing
 - Hedging
 - Reporting
 - Cross-border movements
 - Taxes
 - Environmental and safety demands
- There is strong demand for business solutions designed to meet these requirements.

Commodity volatility exceeds financial volatility and impacts profits

- Unpredictable material costs
- Challenges to pricing
- Unstable operating margins
- Challenging revenue and liquidity planning
- High risk to overall business success

Source: Commerzbank, enterprises' trusted banking partner for risk management, in its Commodity Radar Screen for 3rd Quarter 2014, www.commerzbank.com/commodities



Commodity-intensive industries

Commodity producers



Industry examples

- Oil
- Mining
- Agriculture

Commodity converters



Industry examples

- Chemicals
- Metals and mill products
- Oil and gas refining
- Utilities

Commodity consumers

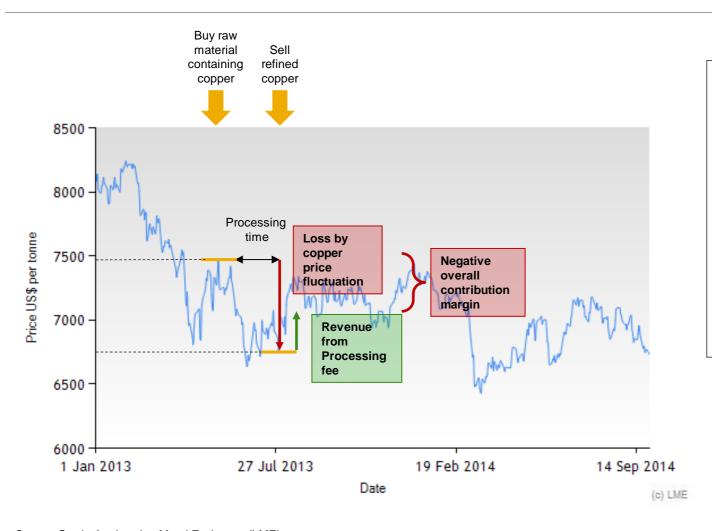


Industry examples

- Automotive
- Consumer products
- High tech
- Aerospace
- Industrial machinery and components
- Defense and security
- Public administration
- Travel and logistics

Impact of Price Volatility for a Metal Smelter

Un-hedged: High Risk Exposure



Key Questions:

- If your S&OP Plan changes, does it trigger Risk Management?
- Does Risk Management know position changes in real-time?
- Can the Chief Risk Manager explain the overall risk position at all times?
- Do CFO, Chief Risk Manager, VP of Purchasing and VP of Sales work seamlessly together?

Copper Grade A – London Metal Exchange (LME) Official Price Curve in US\$/t - Cash Buyer

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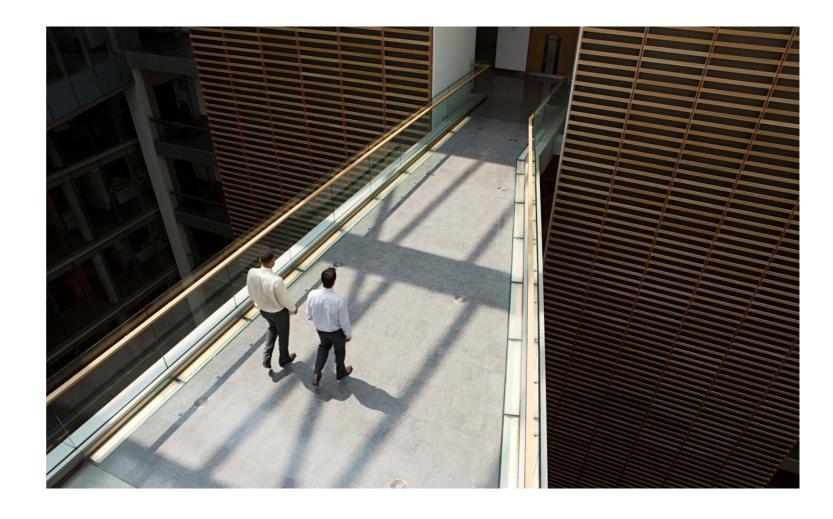
Customer Success

SAP's approach to commodity management

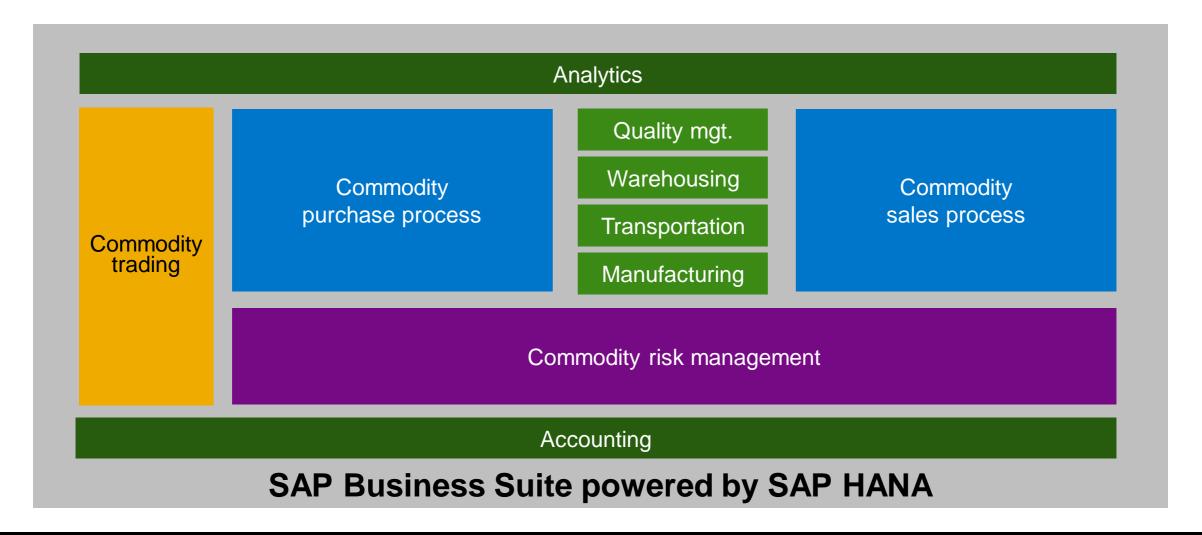
Leverage SAP's core strengths in logistics, finance, and industry solutions

Create a strategic investment area within SAP Business Suite applications, with a dedicated development and solutions team

Collaborate with leading customers and partners to build the solution road map



Commodity management – business building blocks



Motivation for Commodity Management

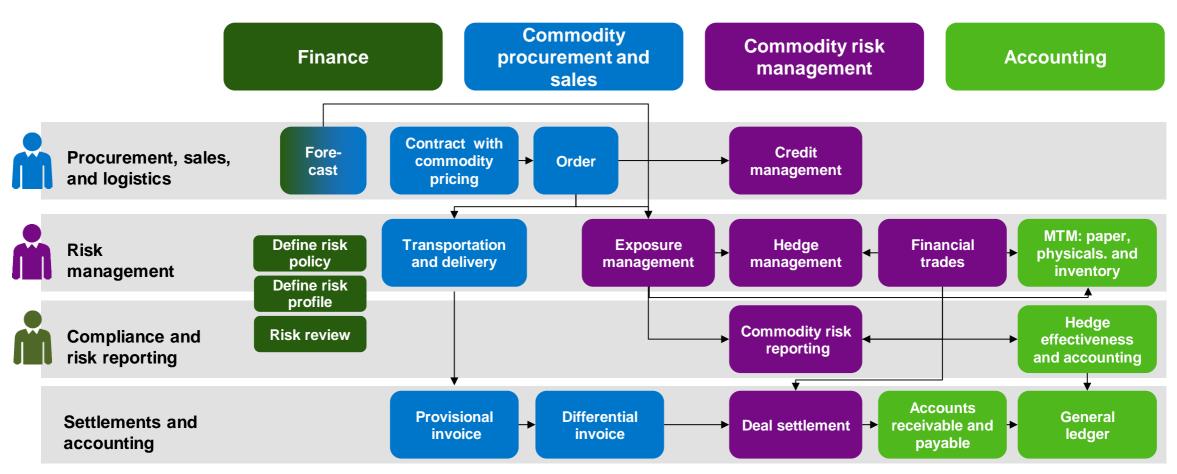
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End-to-end commodity management



The SAP Commodity Management solution streamlines processes – enabling timely and profitable procurement, sales, and hedging of commodities.

Commodity procurement and sales

Capture contract

Create call-off

Transport and delivery

Provisional invoice

Update quality or price

Differential invoice











Flexible commodity pricing rules

Real-time integration with market data from commodity exchanges

Real-time integration with Risk Management

Multiple invoice cycles

Fully integrated in standard purchase and sales order screens

SAP Commodity Pricing Engine



Flexible definition of price rules



Data

SAP Commodity Pricing Engine

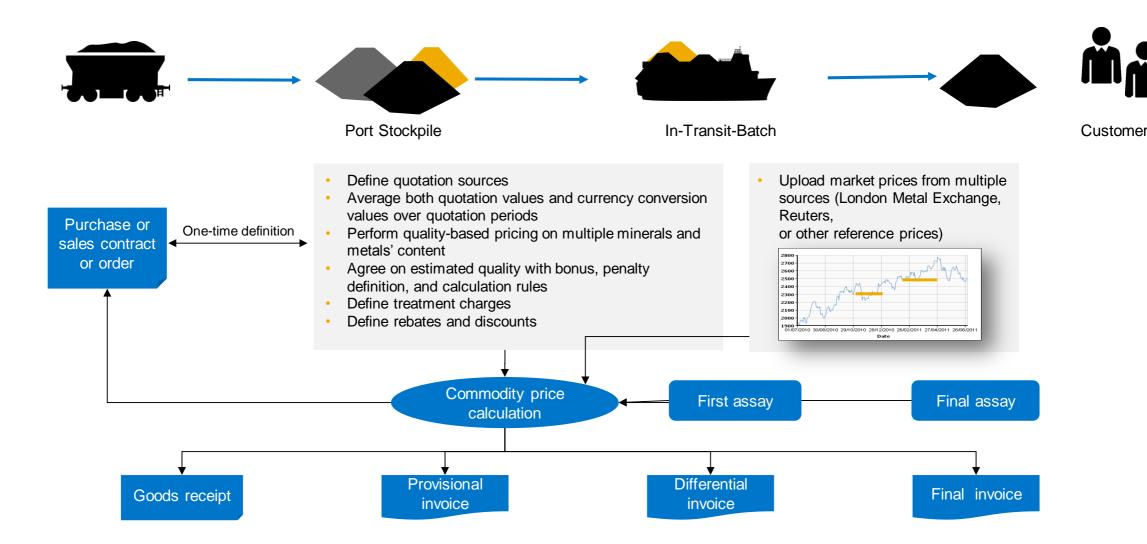
Allows for definition of pricing rules for all commodity related pricing elements

- Commodity price based on market data
- Provisional price rule vs Final price rule
- Differential rules (i.e. Basis pricing)
- Surcharges, Discounts (i.e. Bonus vs Penalty pricing)
- Treatment charges
- Etc...

Integration with market data providers

Fully integrated into core SAP pricing procedures for all other pricing conditions

Commodity pricing for a typical commodity procurement or sales process for metal concentrates



Commodity risk management

Managing physical risk exposure

Assessing risk

Executing hedging strategy

Deal administration

Accounting and settlement

Hedge accounting











Real-time position reporting

Integrated with logistics

Full suite of commodity instruments

Detailed risk reporting

Fully integrated in hedge and standard accounting

Value proposition for integrated SAP Commodity Risk Management



VP of Risk Management

Risk Management and Risk Reporting



Exposure and Position Management













Integration with Accounting and Hedge Accounting



Management of Derivative Transactions

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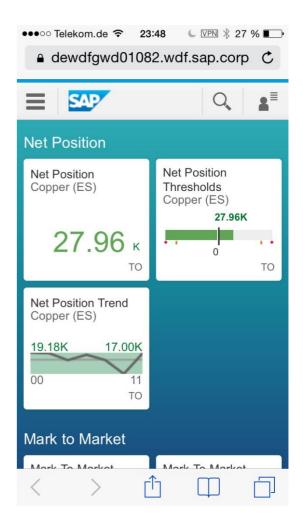
Innovations incl. Demo

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Commodity Management Analytics

Analytics and Usability for Commodity Management have been a major focus in recent Innovations.

- Based on SAP's latest in-memory database innovation HANA
- Leveraging SAP's acclaimed Fiori dashboarding User Interface
- Position reporting & mark-to-market reporting developed in Design-Thinking Co-Innovation with customers



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Demo

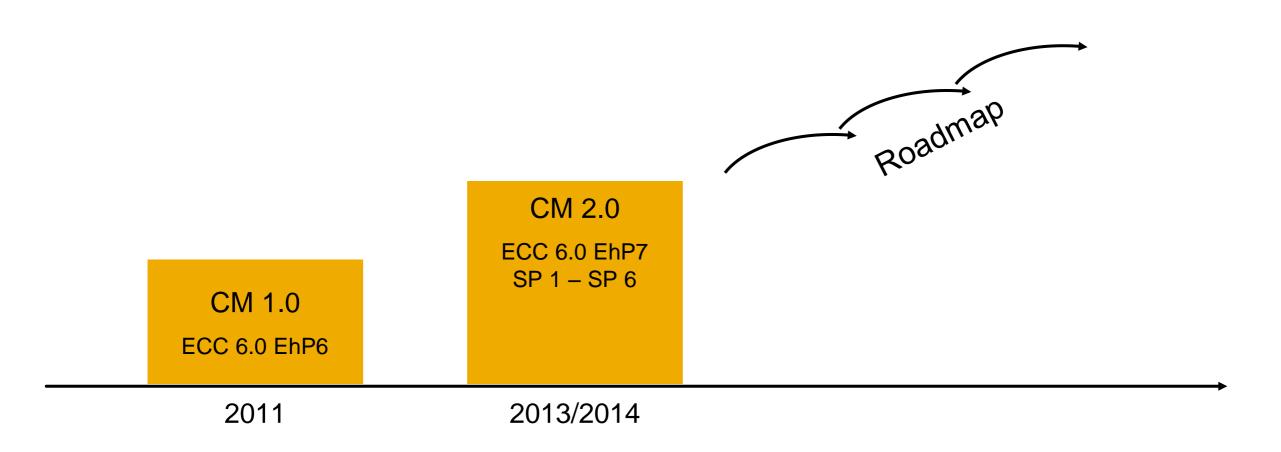


SAP Commodity Management in the Cloud

SAP Commodity Management enables you to manage your Commodity Business end-to-end in the Cloud

- SAP first to release an end-to-end Commodity Management solution in the Cloud
- Run all Commodity Management processes for the entire company or for entire business units in a virtual private cloud
- Choose which SAP Commodity Management solution components to deploy. Any combination of SAP Commodity Procurement, SAP Commodity Sales and SAP Commodity Risk Management is possible.
- Virtual private cloud deployment with ERP and Commodity Management running in the HANA Enterprise Cloud (HEC)
- Available today on SAP HANA Enterprise Cloud with SAP ERP EhP7 SP04 or later.

Commodity Management Innovations



Recent Innovations

Key Enhancements made with CM 2.0, EhP7

Commodity Analytics

- HANA-based analytics
- Fiori User Interface
- Position & Mark-to-Market Reporting

Commodity pricing

- Usability: configurable UI for pricing
- Forward pricing
- Price fixation enhancements

Contract management

- Logistics options
- Contract processing monitor

Revaluation of logistics documents

Update due to market price/curve changes to risk management

Integration with risk management

- GTM trading contracts
- SD/MM contracts including risk distribution plan
- Stock transport order

Period-end valuation

Accruals in accounting

Derivative Transaction management

 Data entry for financial transactions: commodity forward, commodity swap

Market Data Management

Accounting and settlement

- Mass cash settlement
- Margin limit management

And much more...

Future innovation for Commodity Management



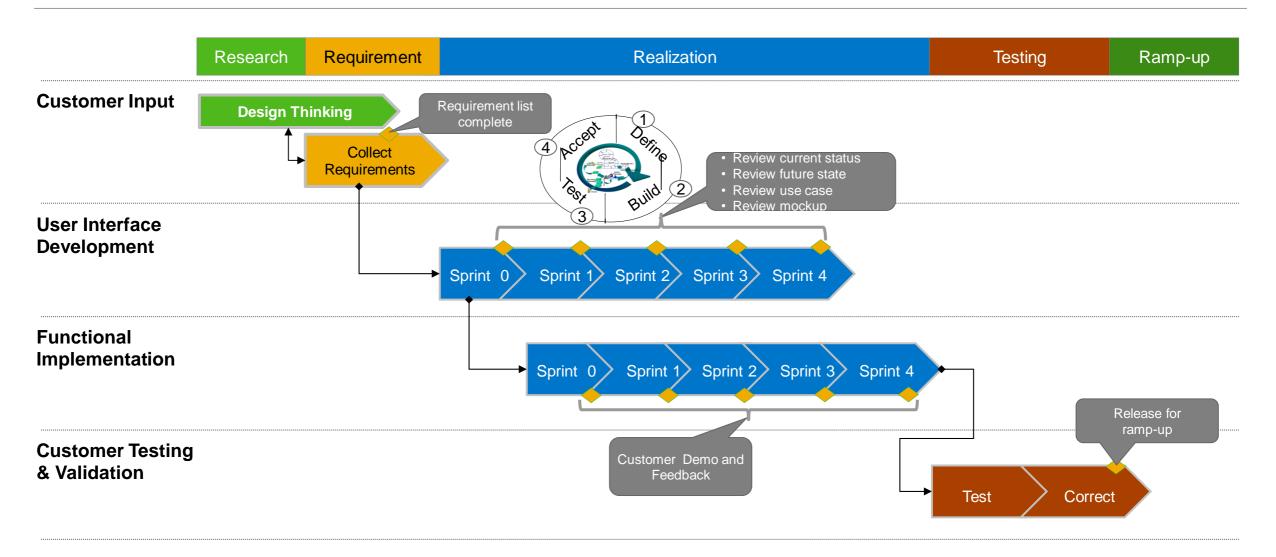
Commodity management

- Role specific analytics, usability & functionality
- Improved usability in transactions and reporting
- Enhanced risk reporting leveraging the real-time capabilities of SAP HANA
- Provide Cloud Deployment Options
- Specific industry requirements
- Full integration of all solution components
- Continued legal compliance, i.e. IFRS 9
- Enhanced financial instruments support

Future direction



SAP Customer Engagement Initiative Collaborative innovation at the core of a new development model



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SAP Commodity Management Customers

70+ customers

have licensed **SAP Commodity Management**













- European CP companies Live with SAP Commodity Risk Management
- European metal company Live with the full suite of applications included in SAP Commodity Management
- Swiss-based oil trading company Implementing the full suite of applications included in SAP Commodity Management
- Various European metals companies In different stages of implementing SAP Commodity Management
- Large international mining company Implementing the full suite of applications included in SAP Commodity Management for the complete business
- U.S. coffee roasting company, Asian agricultural businesses, North American food ingredients company, North American sugar producer, South African precious metals refining and smelting company, and more
- Hundreds of customers Live with SAP Treasury and Risk Management and different versions of SAP's industry solutions.

Nizi: Enabling Transparency and Revenue Growth with SAP® Commodity Management



Company

Nizi International S.A.

Headquarters

Capellen, Luxembourg

Industry

Mill products – metals

Products and Services

Distribution of base metals, ferroalloys, and foundry products

Employees

150

Revenue

€1 billion

Web Site

www.nizi.com

Top objectives

- Grow revenue by expanding into new commodity markets
- Reduce commodity and foreign exchange risks
- Improve visibility and analysis on hedge and trading strategies
- Automate and accelerate mark-to-market reporting to save time and costs

Resolution

- Adopted the SAP® Commodity Management solution, which includes applications for procurement, sales, and risk management, to replace a legacy solution that was unable to adapt easily
- Integrated commodity logistics and financial processes with price and currency risk management modules

Key benefits

- Transparency at all levels, improving relationships with banks and principals and easing the credit process
- Direct link between hedges and trades, enabling analysis to improve future decisions and increase profits
- Flexibility and speed to drive new business with minimal end-user training
- Simpler pricing with automated currency and metal content calculation

"With our ambitions to become a leading global distributor of metals, we went for SAP as the global leader in integrated systems to get a core infrastructure in place which would support our growth."

Ulf Berg, CEO, Nizi International S.A.

25%

Increase in base metal trading revenue resulting from the new aluminum business

80%

Less time to prepare ad hoc mark-tomarket reports

3 weeks

To bring a new commodity on board

Aurubis AG: Excelling in Price Risk Hedging with SAP® Commodity Risk Management



Company

Aurubis AG

Headquarters

Hamburg, Germany

Industry

Mill products – primary metals

Products and Services

Copper production and recycling, alloys, strips, multimetal recycling, precious metals, sulphuric acid, iron silicate stone, electronic scrap recycling, nonferrous metal

Employees

6,500

Revenue

€12.3 billion

Web Site

www.aurubis.com

Partner

SAP® Consulting organization

Top objectives

- Enable price risk hedging with the highest accuracy and integration
- Reduce commodity and foreign exchange risks
- Meet stringent compliance regulations with lowest risk, effort, and cost

Resolution

- Implemented the SAP Commodity Risk Management application to support best practices in price risk hedging
- Simplified, standardized, integrated, and automated processes for all London Metal Exchange derivatives for copper, nickel, lead, tin, and zinc
- Integrated commodity hedging and financial processes

Key benefits

- Significantly lower operational, compliance, and balance sheet risk
- Fewer errors, thanks to automation and integration of derivatives administration with accounting and price risk hedging
- Transparency that improves relationships and trust with auditors, brokers, banks, and customers
- Data stability and improved process controls for simplified auditing
- Users who are very satisfied with the solution

"The investment in SAP Commodity Risk Management paid off when Aurubis was able to comply with the European Market Infrastructure Regulation."

Thomas Goerdt, Head of Group Treasury, Aurubis AG

10 minutes

To conduct mass valuation for all commodity instruments, using internally sourced valuation, algorithms, and data instead of relying on external sources

7 months

To implement and begin supporting the hedging of 17 base and precious metals, completing the project on time and within budget

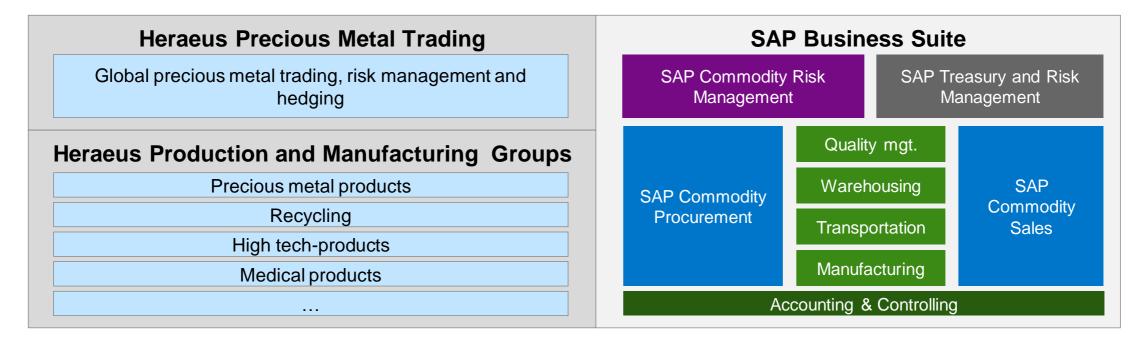
1.1 million

Tons of copper production hedged using SAP Commodity Risk Management

HERAEUS runs SAP Commodity Management



- SAP Commodity Risk Management for management of commodity price risk globally within the Heraeus Group
- Management of commodity derivatives with SAP Commodity Risk Management
- Commodity procurement and sales with SAP Commodity Procurement and SAP Commodity Sales
- Fully integrated commodity management processes within SAP Business Suite



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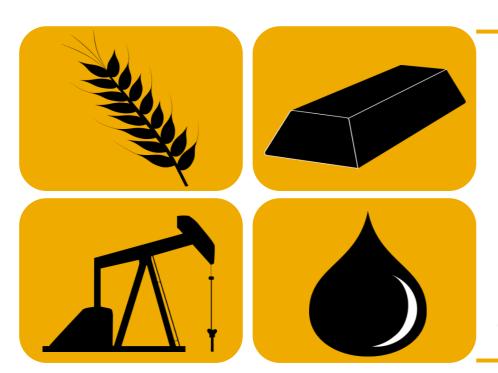
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Customer Success

SAP Commodity Management delivers best-in-class functionalities

SAP Business Suite is a world leader in logistics, finance, and industry solutions



Efficient procurement, conversion, and sales

Flexible costing and pricing

Real-time risk reporting powered by SAP HANA

Integrated logistics, risk management, and finance

Compliant hedging and accounting



Thank you

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