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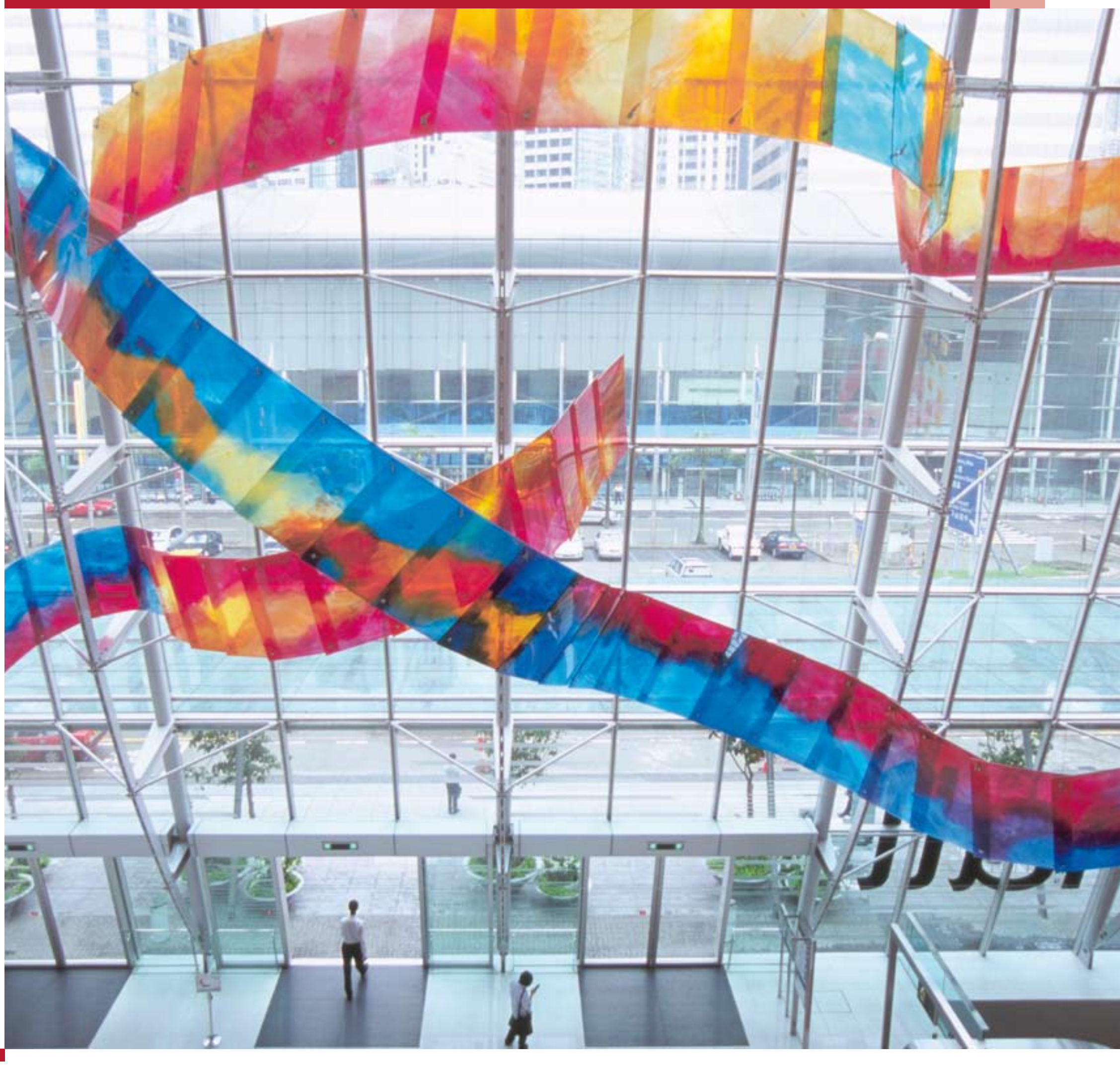
Commodity Trading & Risk Management – Aggregated Steering of Physical and Financial Risks

Globally networked and rapidly changing commodity markets require a specific risk and portfolio management strategy. We support you with comprehensive Commodity Trading & Risk Management (CTRM).



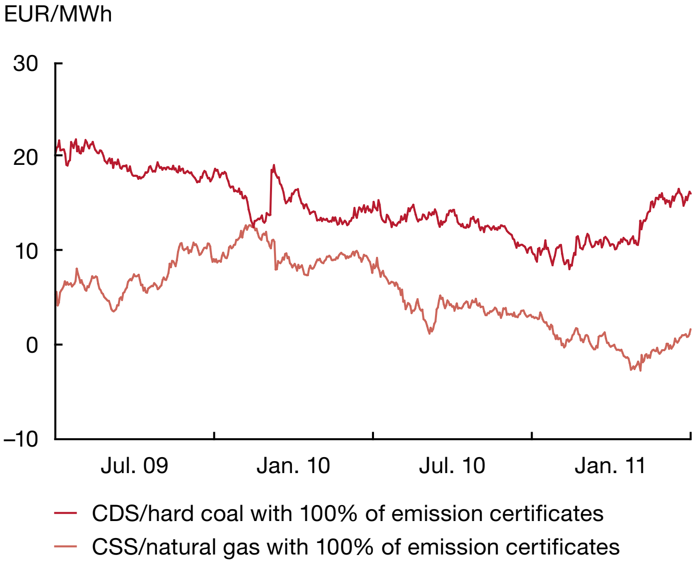
CTRM: Aggregated Steering of Physical and Financial Risks

Background

Within an environment which is increasingly characterized by shortages of raw materials, crises and market fluctuations, it is particularly important for trading companies and companies in the manufacturing industry which are exposed to extensive energy and commodity risks to actively manage their risks and to adopt a disciplined approach in their portfolio management. This development is being driven by the availability of appropriate tradable products on markets with varying degrees of liquidity.

The changes on the global markets have resulted in significant fluctuations in prices on the financial and physical commodity markets for energy and raw materials. The affected companies have already taken action to cope with the resulting effects on their own earnings and liquidity situation. It has become clear that there is frequently an imbalance between the operational risks entered into on the one hand and the necessary risk transparency and control on the other. In many cases, individual risk areas are viewed in isolation, and the interaction with other parts of the company and risk areas is neglected. Risk management is perceived not so much as an active management function. Instead it is frequently directed towards merely avoiding risk.

Clean-Dark-Spread/Clean-Spark-Spread



The challenges

Many companies in the energy and commodity field have already fully utilized the possibilities of internal hedging, i.e. the process of passing on risks to their customers. In the next step, they attempt to hedge the remaining credit and market risk positions by means of transactions on the traded markets. Suitable financial and physical products have to be identified for this purpose.

The interaction between “traditional” purchasing and sales agreements and the concluded transactions of standard products has far-reaching implications for the business processes, the IT systems which are used, the process of settling contracts and also the internal control system. Purchasing and portfolio management for instance have to be constantly synchronized with sales and production planning. Market price data has to be made available on a daily basis for risk assessment purposes. The necessary amount of working capital has to be maintained for margin payments on exchanges or directly to counterparts. Increased costs for assessing the creditworthiness of market players have to be taken into consideration.

In line with this process, the legislative authorities are devoting increasing attention to trading activities on the energy and commodity markets. There is a correspondingly rapid development in the regulatory environment for companies trading on commodity markets. For instance, consideration is being given to ensuring that non-financial companies will also be extensively monitored by external regulators; for over-the-counter (OTC) transactions, this would require central processing of transactions and the provision of collateral in line with normal market practice.

Strictly organized management of complex portfolios consisting of standardized and structured contracts frequently with numerous commodities is becoming a key factor of success. As an affected company, you should be aware of the challenges and possibilities as well as the increasing significance of risk management issues posed by a changing market, regulatory and trading climate.

CTRM at a glance

Background
- High price volatilities on commodity markets
- Increasing liquidity of the traded spot and forward markets
- Potential for optimizing traditional long-term procurement contracts, sales portfolios and invested assets

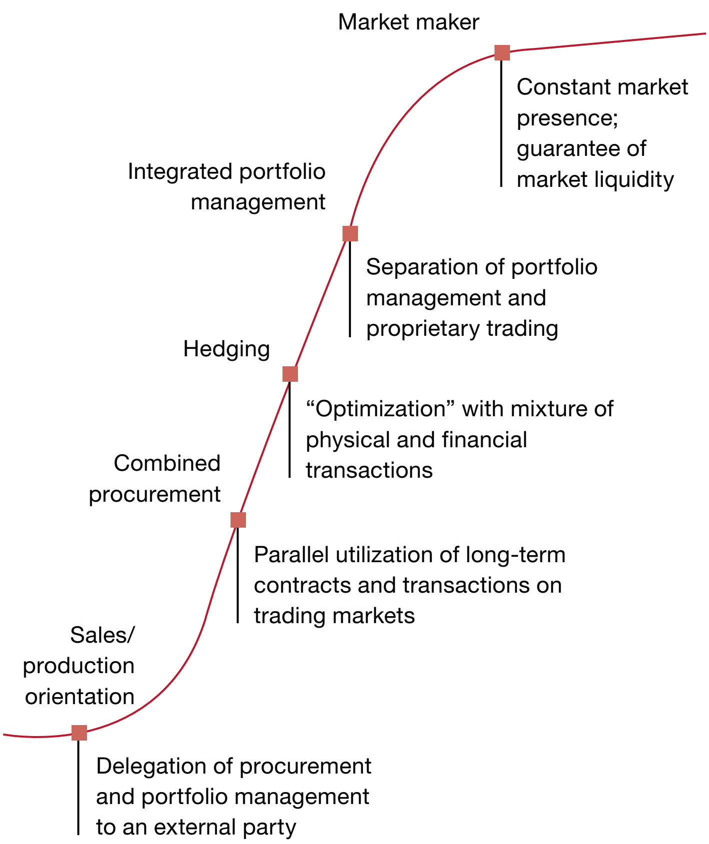
Challenges
- Significant price fluctuations in the trading and/or production margins
- Lack of transparency; risk aggregation of the company's overall portfolio in a central unit
- Need to redefine and extensively revise the processes in line with the requirement of functioning portfolio management

Criteria of success
- Definition of an explicit risk strategy and implementation of the relevant processes in the existing organization
- Implementation of suitable tools for risk assessment; explicit guidelines for trading activities, reporting and commissioning/utilization of information technology

Benefits
- Increased transparency for all purchasing and sales activities; quantification of risks in relation to the business strategy
- Integrated solution for the relevant roles in the front, middle and back office
- Improvement of own position with regard to the competition

CTRM has to be linked closely with the company's strategy. The affected companies each have to cope with a specific situation for adjusting to changing commodity markets.

CTRM is based on the company's business strategy



Our approach: A working CTRM is a key link between the business strategy and implementation in the company's processes.

Based on this and our project expertise we have developed concepts for the following focus topics:
- Risk measurement and modeling
- Risk aggregation
- Criteria for functioning risk management
- CTRM compliance
- CTRM system selection and introduction
- Commodity accounting

Risk measurement and modeling
Following the liberalization of gas and electricity markets, utilities and municipal operations have been subject to increased market price and volume risks arising from purchasing, sales, portfolio management and energy trading. Entering into new contracts, investment decisions and transactions depends on many market expectations and risks as well. With regard to effective risk management and monitoring as well as appropriate strategic decisions, companies are increasingly focusing on quantifying the values and risks of physical and financial contracts and strategic assets, e.g. power stations and production facilities.

The commodity price risk – including the associated exchange rate risk – is also a major risk factor for companies in the steel and metal industry. The consequences are potential losses in terms of sales and margins, increased volatilities in terms of results, deterioration of financial ratios and a significantly negative impact on liquidity.

How we can support you

- Identification and quantification of the market price risks entered into during the process of commodity and energy procurement
- Analysis of the models used to evaluate the external and internal structured contracts
- Review of the valuation assumptions used for the quarterly and annual financial statements
- “Benchmarking” of sales products based on traded markets
- Structuring of regular risk measurement and risk reporting (Profit & Loss, Profit-at-Risk)

Risk aggregation

Companies are facing the task of centrally managing their commodity positions within a portfolio management and trading function. However, in practice, there are frequent problems of implementation for such a concept, which may for instance result from risks held locally by sales or production planning. However, the efficient transfer of risks from these local units is essential for a comprehensive risk overview. There is thus the requirement for synchronizing the structured procurement and sales activities as well as production planning with products based on trading markets.

How we can support you

- Explicit formulation of the risk strategy
- Description of distribution of roles in the organization
- Review of sales portfolio(s) and the products used in retail business
- Review of the assessment of the transfer price system used between portfolio management and other parts of the company
- Preparing guidelines for the cycles of transferring risk to portfolio management
- Assessing the suitability of IT systems for capturing and managing complex products

Risk management

An appropriate risk management system is necessary as the company’s results and cash flows become increasingly dependent on an adequate risk management system. Benchmark criteria are required as a basis to assess the company’s current organization. It is also frequently necessary to segregate portfolio management (as an internal service for other parts of the organization) from proprietary trading which is driven by market price expectations. Evidence of such adequacy and functionality of the risk management system for commodities is also a key criterion of the relevant accounting rules (e.g. IFRS hedge accounting).

How we can support you

- In-depth analysis of the portfolio management control loop and the units involved
- Use best practice to screen benchmarking of the risk management guidelines, processes and sub-activities (e.g. derived from MaRisk)
- Specification of the requirements for a CTRM system; consideration of the interfaces to other systems
- Optimizing deployment of capital and liquidity planning
- Transfers between trading result and EBIT

One example taken from our consultancy practice

Client

Major energy trading company with activities in procurement, trading, production and distribution

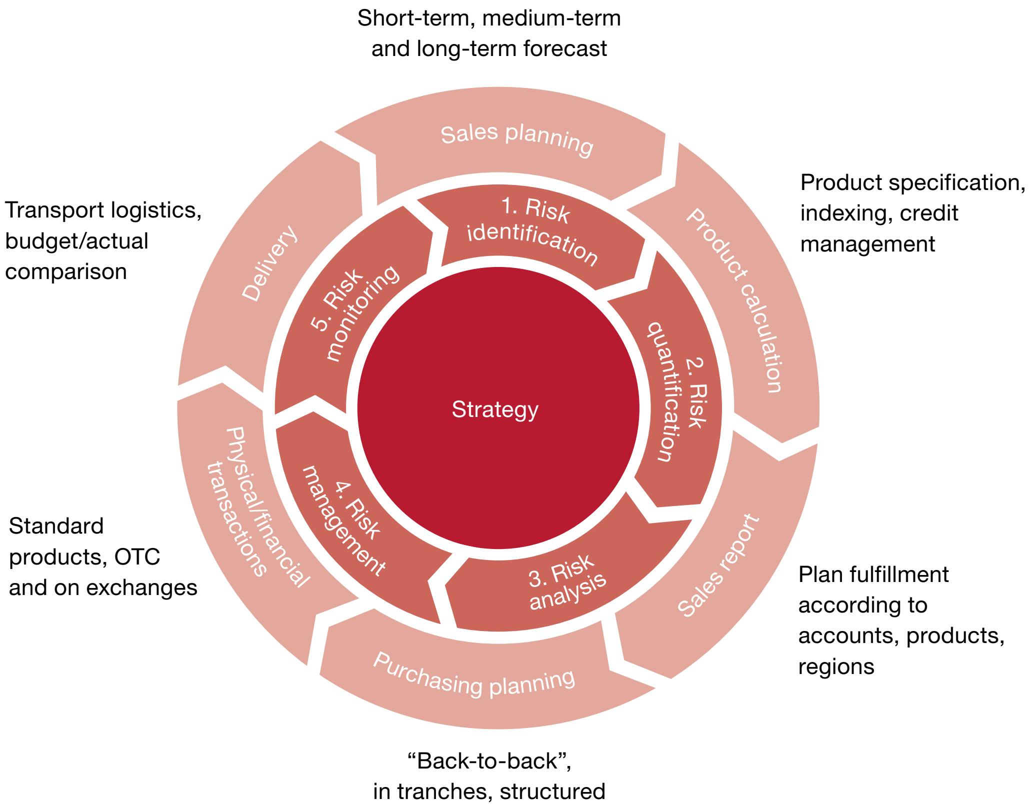
Requirement

Analysis of risk measurement, limits and risk reporting of and reporting of the energy portfolio, consisting of complex non-standard transactions in procurement and distribution as well as standard transactions on the traded markets. Assessment of the consistency of the used model and input data; recording of transfer processes between corporate entities and the applied internal pricing, development of recommended actions to enhance the robustness of the affected processes.

Procedure

Assessment of the mathematical principles, the input parameters and the backtesting procedures of the model used for risk measurement purposes; verification of consistent compliance with the existing limit structures in portfolio and risk management; increasing regularity of the updating cycle for the positions from structured procurement and sales agreements and the subsequent transactions on the traded markets. Define data inferfaces for ensuring consistency of risk reporting with accounting.

CTRM consists of three levels



- The risk management approach is based on the criteria specified by management, e.g. for working capital management, risk appetite and liquidity planning.
- A functioning risk management system is an essential link between the business strategy and the implementation of this strategy in the company's processes.
- The specific process implementation is characterized by control loops which are executed regularly for the portfolios of input materials (annual, monthly, daily).

CTRM compliance

With regard to concluding and managing market transactions, it is important for companies to be aware of and assess the legal requirements and regulations of the various contract forms and contract types (e.g. physical/financial, OTC/exchanges), and to ensure relevant compliance within the corresponding business processes.

The extent of application of MiFID exemptions (Markets in Financial Instruments Directive) for commodity trading have to be assessed continuously. It is also expected that Over-The-Counter trading will be subject to greater regulation in future (e.g. central trading register required). There are also planned extensive regulations with regard to insider and manipulative trading. This will result in increasing administrative costs for companies as part of their trading activities.

How we can support you

- Analysis of the individual effects of regulation efforts and quantification of costs
- Internal set of rules regarding compliance of trading activities
- Structuring of reporting to regulator
- Manual for exchange registration
- Process analysis and training of relevant persons
- Establish functional entities responsible for monitoring and communication

Selection and introduction of CTRM systems

There is a wide range of CTRM systems with different functionalities and scope. However, non-integrated and individual IT solutions continue to be used in central areas of portfolio management and risk controlling (e.g. for recording so-called structured contracts and for risk assessment purposes). For proper appraisal, identification and introduction of suitable CTRM solutions, involving considerable project volumes, it is extremely important to critically assess the functionality of the systems which can be potentially implemented. On the other hand, the separate function-specific requirement profiles have to be identified and prioritized within the own organization.

How we can support you

- Documentation and analysis of the existing process and IT landscape; managed and prioritized recommendations for process improvement
- Support in the system selection process
- Support in all system introduction phases
- Preparation of test concepts and performance of tests
- Quality assurance and project management

One example taken from our consultancy practice

Client
Major energy distribution company

Requirement
Quality assurance related to the implementation of an integrated IT solution for central portfolio management of all sales-related products.

Procedure
Assessment of the risk management concept, incl. the procurement and hedging strategies; analysis and assessment of the IAS 39 valuation models and the related implementation in the IT; analysis of the requirements applicable for interfaces to upstream and downstream IT systems; assessment of the migration concept regarding compliance with legal requirements and performance of data reconciliations; assessment of the interface concepts and quality assurance of the functional and integration tests.

Commodity Accounting

The rules regarding the valuation of CTRM portfolios and transactions in accounting which are currently subject of discussion (IFRS 9) offer principally an enhanced flexibility. Due consideration is given to the fact that the figures in accounting provide a realistic reflection of the impact of portfolio management on the accounts. For instance, IFRS 9 (Hedge Accounting) allows the hedging of components and net positions. Under German GAAP, portfolio hedges are permitted on condition that adequate and documented risk management has been implemented. The move away from a focus on individual agreements towards a focus on portfolios means that it is becoming more complex for these rules to be implemented, and consistent compliance is becoming correspondingly more difficult.

How we can support you

- Analysis of accounting implications as a result of different hedging strategies
- Appropriate design of guidelines and book structures
- Integration of accounting requirements in the portfolio management control loop
- Assuring the flow of information between portfolio management and accounting
- Compliance with documentation requirements (e.g. tests of effectiveness)

One example taken from our consultancy practice

Client
Regionally operating distribution company for gas and electricity

Requirement
Formation of valuation units in accordance with local GAAP and IFRS; combination of the underlying contracts and the related hedging instruments in a portfolio hedge; evaluation of individual contracts based on market prices; compliance with the standard requirements regarding a functioning risk management process.

Procedure
Documentation and recommendations for improvement of the actual processes in operational portfolio management in conjunction with sales support and the trading function; formalization of the regularly performed planning meeting and reporting to management; conception and structuring of a portfolio overview with all physical and financial transactions; comparison of schedule of quantities and transfer of positions to downstream systems in accounting; supporting evidence for the hedge effectiveness and documentation.

About us

Our clients face diverse challenges, strive to put new ideas into practice and seek expert advice. They turn to us for comprehensive support and practical solutions that deliver maximum value. Whether for a global player, a family business or a public institution, we leverage all of our assets: experience, industry knowledge, high standards of quality, commitment to innovation and the resources of our expert network in over 150 countries. Building a trusting and cooperative relationship with our clients is particularly important to us – the better we know and understand our clients' needs, the more effectively we can support them.

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