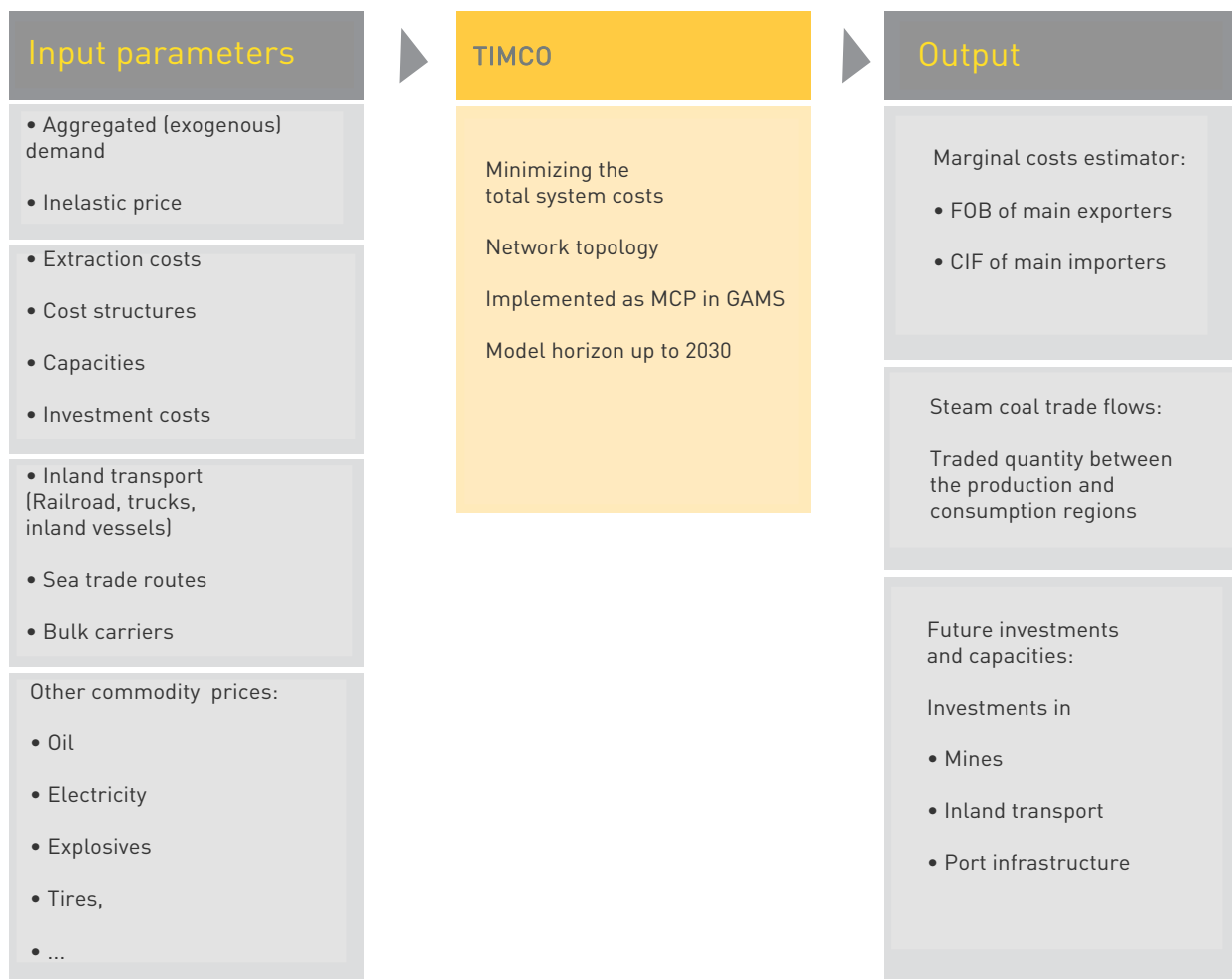


TIMCO

The model

TIMCO is a long-term equilibrium model that simulates the potential developments in the global coal market up to 2030, taking into account global interdependencies. TIMCO is a dynamic, spatial, and intertemporal model. It is supply oriented and in its standard version has the objective of satisfying the global steam coal demand assuming perfect competition. TIMCO also allows strategic behaviour of individual players to be modelled thanks to the flexibility of mixed complementary programming (MCP).

The model considers all significant steam coal mining locations on the supply side as well as specific supply characteristics. The detailed cost patterns of steam coal allow for a well-founded estimate regarding the cost development of mining to be made, taking into account the price trends of key production factors. Additionally, TIMCO can endogenously model the supply-side investment decisions. The demand side is represented by demand regions in which the default fixed demand values can be substituted by a price-sensitive demand function.



TIMCO therefore provides a consistent quantitative analysis of future development pathways of the steam coal market taking into account significant fundamental market structures. Major results of the model include trade flows, production quantities, investments as well as marginal costs or prices.

Coal Market Analyses

Possible applications

Mid- and long-term scenario analyses

TIMCO is especially well-suited for scenario-based analyses to identify the impact of various external effects on the steam coal market for cases such as

- Analysing the impact of various transport investment decisions on global coal trade and the security of supply
- Analysing the impact of coal export quotas on the global price
- Analysing the impact of different demand trends with respect to investment decisions

Price forecasts

TIMCO produces forecasts of the major steam coal price indexes, thereby supporting and enhancing trading activities.

Asset valuation

TIMCO acts as a support and asset valuation tool for investment decisions such as mines and transport infrastructure projects.

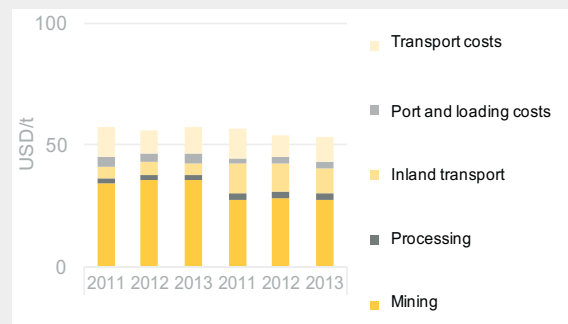


Fig.1: Cost components of steam coal to North-West Europe (Colombia)

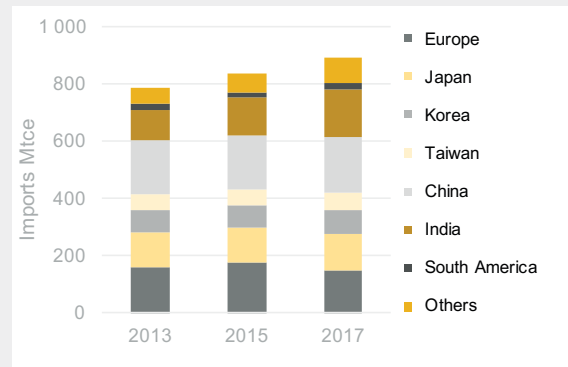


Fig.2: Overseas trade: Steam coal imports

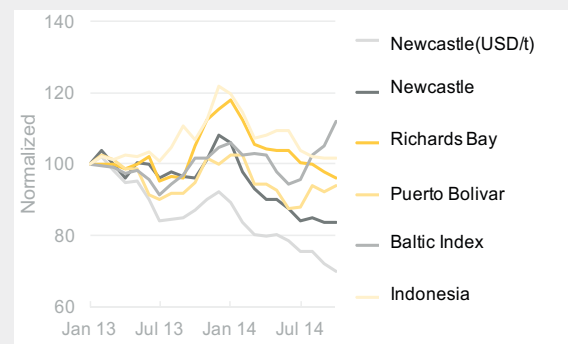


Fig.3: Global coal price indices

Have we sparked your interest? Please feel free to contact:

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