

Fertilizer Swap Producer Example

Assume a producer has 40,000 tonnes of physical Urea to place in September. The current average spot price is \$780 per tonne (pt) FOB Yuzhnyy. However, the producer/seller anticipates prices weakening. Using an FIS cash settled swap, the producer is able to offset a decrease in physical prices as follows:

Bidders are at **\$770 pt** FOB Yuzhnyy for September:

- The producer (seller) contracts with a bidder (buyer): **40,000 t × \$770 pt FIS swap for September**
- Market **prices weaken in September** – physical sale prices fall to an average of **\$760 pt**
- **Physical market: 40,000 t × 760 pt = \$30,400,000** (physical sales revenue)

FIS swap	\$770 pt
Fertilizer Index average (September)	\$760 pt
Differential	\$10 pt

FIS cash-settled swap settlement:

Buyer pays producer/seller: 40,000 t × \$10 pt = **\$400,000**

Total Revenue = Physical sales + FIS cash settled swap

\$30,400,000 (physical) + \$400,000 (FIS swap) = \$31,800,000

\$31,800,000 / 40,000 t = \$770.00 pt

In this example, the producer/seller achieves an average return of \$770* pt despite the fall in physical prices to \$760

Partial swap

The producer/seller has 40,000 tonnes of physical Urea to place in September and anticipates prices weakening, but **decides to hedge just 20,000 t** using an FIS cash settled swap. Market prices *weaken* in September – physical sale prices fall to average at \$760 pt:

FIS swap	20,000t × \$ 770 pt
Physical position	40,000 t × \$ 760 pt
Differential	\$ 10 pt

FIS cash-settled swap settlement:

Buyer pays producer/seller: 20,000 t × \$10 pt = **\$200,000**

Total Revenue = Physical sales + FIS cash settled swap

\$30,400,000 (physical) + \$200,000 (FIS swap) = \$ 30,600,000

\$30,600,000 / 40,000 t = \$ 765 pt

In this example the producer/seller achieves an average return of \$765* pt despite the fall in physical prices to \$760 pt in September

***Please note – FIS broker commission is USD 0 .50 (50 cents) per ton which should be deducted from the final calculation.**