



GX Approach to Seasonality

GX takes into account seasonality in all refined product markets where spot market activity reflects transitions between grades with different seasonal requirements. In motor fuels, key seasonal parameters include evaporability and cold filter plugging point. Within European refined products, GX gasoline, diesel and heating oil index calculations incorporate seasonality during the twice-annual transition between summer and winter grades. In the case of diesel barges, the calculations further incorporate transitions to/from intermediate grade product.

In the case of all GX European refined product markets whose final index value is calculated basis 16.30 London, the swaps-derived implied price curve against which GX judges the competitiveness of physical indications is adjusted during seasonal transition periods. Two tranches – one reflecting the incoming grade and the other the outgoing grade – are created on the basis of the seasonal transition calendar. Those points within the curve corresponding to dates comprising the shorter tranche are adjusted to take into account the prevailing differential between the incoming and outgoing grade. This differential is informed by market feedback.

On days during the seasonal transition where both grades are reflected in a sufficient number of days in the implied price curve such that full five-day laycans are captured, two separate assessment price curves are created – one for each grade – and then fused to reflect that day's transitional calendar, creating the final index calculation.

In some instances, the outgoing/incoming grade may be considered as setting a price floor/ceiling for the other grade. For example, during the transition from winter to summer grade on ULSD cargoes, winter grade indications for summer dates would be considered a quality giveaway, and therefore could potentially set a price ceiling for the summer curve, if priced more competitively than summer indications.

Gasoline Eurobob Oxy NWE FOB Barges, Eurobob Non-Oxy NWE FOB Barges Applicable GX codes: GX0000002, GX0000004

GX reflects gasoline grades which meet EN228 specifications after being blended with the requisite amount of ethanol necessary for E5 or E10 gasoline grades. The full parameters are available in the factsheets for these indexes.

GX Eurobob gasoline must meet German DIN specifications for seasonality: maximum Reid Vapor Pressure (RVP) of 90kPa in winter and 60kPa in summer. Summer grade is fully reflected no later than 1 April onwards and winter grade no later than 1 October onwards. Currently, GX Eurobob indexes do not take intermediate grades into account for index calculation purposes.

The GX Eurobob transition dates between summer and winter grades are selected on the basis of the above-mentioned seasonal cut-off dates as well as the standard loading period and nomination timelines for barges reflected in this index. The last day on which the outgoing grade is solely reflected is selected such that this grade will not load after the seasonal cut-off, while the last day of the



transition period is selected such that a barge traded on this day cannot be nominated such that the outgoing grade loads after the seasonal cut-off.

Following this logic, for 2021, GX will reflect only winter grade until 23 March, summer grade only from 29 March to 22 September, and winter grade only from 28 September until the winter-to-summer transition in March 2022. Both winter and summer grades will be accepted in the index process during 24-26 March and 23-27 September, in line with the calculation methodology.

Gasoline 95 Ron NWE FOB Barges, NWE CIF Cargoes and Med FOB Cargoes Applicable GX codes: GX0000006, GX0000008, GX0000010

GX reflects gasoline grades which meet EN228 specifications, with a minimum 95 RON octane and a reference density of 0.755kg/l. The maximum sulphur content is 10ppm.

Gasoline 95 Ron FOB NWE Barges and CIF NWE Cargoes reflect a maximum E70 of 43% in winter-grade product and 41% in summer-grade product, and maximum RVP of 90kPa for winter grade and 60kPa for summer grade.

Gasoline 95 Ron FOB Med Cargoes reflect Italian, French and Spanish specifications for seasonality: the maximum RVP is 80kPa in winter and 60kPa in summer.

Summer grade is fully reflected no later than 1 April onwards and winter grade no later than 1 October onwards. GX will announce seasonal transition dates for the barge and cargo markets at least one month prior to the switchover, i.e. no later than 1 March and 1 September. The precise dates will vary year-on-year, but are selected to take into account the 3/5-15 day forward loading period for barges and the 10-25 day forward loading period for cargoes, and ensuring that barges and cargoes of the outgoing seasonal grade are not reflected after the relevant transition cut-off. GX's transition calendar will phase out the incumbent grade and give the incoming grade an increasing weighting in the assessment.

ULSD NWE CIF Cargoes, Med CIF Cargoes Applicable GX codes: GX0000093, GX0000094

GX reflects 10ppm diesel grades in North West Europe which meet Benelux or French specifications, while the Mediterranean index reflects French specification. Both indexes reflect ultra-low sulphur diesel grades, with a maximum sulphur content of 10ppm, density of 0.820-0.845kg/l and a so-called "bright and clear" aspect.

Summer grade must be fully reflected no later than 1 April onwards and winter grade no later than 1 October onwards. GX will announce seasonal transition dates for the cargo markets at least one month prior to the switchover, i.e. no later than 1 March and 1 September. The precise dates will vary year-on-year, but are selected to take into account the 10-25 day forward loading period for cargoes, and ensuring that barges and cargoes of the outgoing seasonal grade are not reflected after the relevant transition cut-off. GX's transition calendar will phase out the incumbent grade and give the incoming grade an increasing weighting in the assessment.

ULSD NWE FOB Barges Applicable GX code: GX0000095

GX reflects 10ppm diesel grades which meets German DIN specification ultra-low sulphur diesel, with a maximum sulphur content of 10ppm and density of 0.820-0.845kg/l. The transition from winter- to



intermediate-grade product typically takes place in February, and the switch from intermediate- to summer-grade in March-April. The summer-to-intermediate transition typically takes place in September and the intermediate-to-winter switch typically in October.

GX will announce exact seasonal transition dates at least one month prior to the switchover. The dates will vary year-on-year, but are selected to take into account the 3/5-15 day forward loading period for barges, and ensuring that barges of the outgoing seasonal grade are not reflected after the relevant transition cut-off. GX's transition calendar will phase out the incumbent grade and give the incoming grade an increasing weighting in the assessment.

Gasoil 0.1% Med CIF Cargoes Applicable GX code: GX0000083

GX reflects 0.1% gasoil in the Mediterranean which meets Spanish specifications with a maximum sulphur content of 0.1% (1,000 ppm) and a so-called "bright and clear" aspect.

Summer grade must be fully reflected no later than 1 April onwards and winter grade no later than 1 October onwards. GX will announce seasonal transition dates for the cargo markets at least one month prior to the switchover, i.e. no later than 1 March and 1 September. The precise dates will vary year-on-year, but are selected to take into account the 10-25 day forward loading period for cargoes, and ensuring that cargoes of the outgoing seasonal grade are not reflected after the relevant transition cut-off. GX's transition calendar will phase out the incumbent grade and give the incoming grade an increasing weighting in the assessment.