Commission Delegated Regulation (EU) 2019/331 of 19 December 2018 determining transitional Union-wide rules for harmonised free allocation of emission allowances pursuant to Article 10a of Directive 2003/87/EC of the European Parliament and of the Council (Text with EEA relevance)

ANNEX III

Historical activity level for specific benchmarks referred to in Articles 15(8) and 17(f)

1. The product-related historical activity level for the baseline period for products to which the refinery product benchmark as referred to in Annex I applies on the basis of the different CWT functions, their definitions, the basis for throughput as well as the CWT factors as listed in Annex II, shall be determined according to the following formula:

$$HAL_{CWT} = ARITHMETIC\ MEAN\left(1{,}0183 \times \sum_{i=1}^{n}\left(TP_{i,k} \times CWT_i\right) + 298 + 0{,}315 \times TP_{AD,k}\right)$$

whereby:

HAL_{CWT}	:	historical activity level expressed as CWT
$TP_{i,k}$	:	throughput of the CWT function i in year k of the baseline period
CWT_i	:	CWT factor of the CWT function i
$TP_{AD,k}$	:	throughput of the CWT function 'Atmospheric Crude Distillation' in year k of the baseline period

2. The product-related historical activity level for the baseline period for products to which the lime product benchmark as referred to in Annex I applies shall be determined according to the following formula:

$$HAL_{lime,standard} = ARITHMETIC\ MEAN\left(\frac{785 \times m_{CaO,k} + 1092 \times m_{MgO,k}}{751{,}7} \times HAL_{lime,uncorrected,k}\right)$$

whereby:

$HAL_{lime,standard}$	:	historical activity level for lime production expressed in tons of standard pure lime
$m_{CaO,k}$	:	content of free CaO in the produced lime in year k of the baseline period expressed as mass-% In case no data on the content of free CaO is available, a conservative estimate not higher than 85 % shall be applied.
$m_{MgO,k}$	:	content of free MgO in the produced lime in year k of the baseline period expressed as mass-% In case no data on the content of free MgO is available, a conservative estimate not higher than 0,5 % shall be applied.
$HAL_{lime,uncorrected,k}$	:	uncorrected historical activity level for lime production in year k of the baseline period expressed in tonnes of lime

3. The product-related historical activity level for the baseline period for products to which the dolime product benchmark as referred to in Annex I applies shall be determined according to the following formula:

$$HAL_{dolime,standard} = ARITHMETIC\ MEAN\left(\frac{785 \times m_{CaO,k} + 1092 \times m_{MgO,k}}{865{,}6} \times HAL_{dolime,uncorrected,k}\right)$$

whereby:

$HAL_{dolime,standard}$	:	historical activity level for dolime production expressed in tonnes of standard pure dolime
$m_{CaO,k}$	:	content of free CaO in the produced dolime in year k of the baseline period expressed as mass-% In case no data on the content of free CaO is available, a conservative estimate not higher than 52 % shall be applied.

$m_{MgO,k}$: content of free MgO in the produced dolime in year k of the baseline period expressed as mass-%

In case no data on the content of free MgO is available, a conservative estimate not higher than 33 % shall be applied.

$HAL_{dolime,uncorrected,k}$: uncorrected historical activity level for dolime production in year k of the baseline period expressed in tonnes of lime

4. The product-related historical activity level for the baseline period for products to which the steam cracking product benchmark as referred to in Annex I applies shall be determined according to the following formula:

$$HAL_{HVC,net} = ARITHMETIC\ MEAN(HAL_{HVC,total,k} - HSF_{H,k} - HSF_{E,k} - HSF_{O,k})$$

whereby:

$HAL_{HVC,net}$: historical activity level for high value chemicals net of high value chemicals produced from supplemental feed expressed in tonnes of HVC

$HAL_{HVC,total,k}$: historical activity level for total high value chemicals production in year k of the baseline period expressed in tonnes of HVC

$HSF_{H,k}$: historical supplemental feed of hydrogen in year k of the baseline period expressed in tonnes of hydrogen

$HSF_{E,k}$: historical supplemental feed of ethylene in year k of the baseline period expressed in tonnes of ethylene

$HSF_{O,k}$: historical supplemental feed of other high value chemicals than hydrogen and ethylene in year k of the baseline period expressed in tonnes of HVC

5. The product-related historical activity level for the baseline period for products to which the aromatics product benchmark as referred to in Annex I applies on the basis of the different CWT functions, their definitions, the basis for throughput as well as the CWT factors as listed in Annex II shall be determined according to the following formula:

$$HAL_{CWT} = ARITHMETIC\ MEAN(\sum_{i=1}^{n}(TP_{i,k} \times CWT_i))$$

whereby:

HAL_{CWT} : historical activity level expressed as CWT

$TP_{i,k}$: throughput of the CWT function i in year k of the baseline period

CWT_i : CWT factor of the CWT function i

6. The product-related historical activity level for the baseline period for products to which the hydrogen product benchmark as referred to in Annex I applies shall be determined according to the following formula:

$$HAL_{H2} = ARITHMETIC\ MEAN\left(HAL_{H2+CO,k} \times \left(1 - \frac{1-VF_{H2,k}}{0{,}4027}\right) \times 0{,}00008987\frac{t}{Nm^3}\right)$$

whereby:

HAL_{H2} : historical activity level for hydrogen production referred to 100 % hydrogen

$VF_{H2,k}$: historical production volume fraction of pure hydrogen in the total volume of hydrogen and carbon monoxide in year k of the baseline period

$HAL_{H2+CO,k}$: historical activity level for hydrogen production referred to historical hydrogen content expressed as norm cubic meters per year referring to 0 °C and 101,325 kPa in year k of the baseline period

7. The product-related historical activity level for the baseline period for products to which the synthesis gas (syngas) product benchmark as referred to in Annex I applies shall be determined according to the following formula:

$$HAL_{syngas} = ARITHMETIC\ MEAN\left(HAL_{H2+CO,k} \times \left(1 - \frac{0{,}47 - VF_{H2,k}}{0{,}0863}\right) \times 0{,}0007047 \frac{t}{Nm^3}\right)$$

whereby:

HAL_{syngas} : historical activity level for synthesis gas production referred to 47 % hydrogen

$VF_{H2,k}$: historical production volume fraction of pure hydrogen in the total volume of hydrogen and carbon monoxide in year k of the baseline period

$HAL_{H2+CO,k}$: historical activity level for synthesis gas production referred to historical hydrogen content expressed as norm cubic meters per year referring to 0 °C and 101,325 kPa in year k of the baseline period

8. The product-related historical activity level for the baseline period for products to which the ethylene oxide/ethylene glycols product benchmark as referred to in Annex I applies shall be determined according to the following formula:

$$HAL_{EO/CG} = ARITHMETIC\ MEAN\left(\sum_{i=1}^{n} \left(HAL_{i,k} \times CF_{EOE,i}\right)\right)$$

whereby:

$HAL_{EO/EG}$: historical activity level for ethylene oxide/ethylene glycols production expressed in tonnes of ethylene oxide equivalents

$HAL_{i,k}$: historical activity level for the production of the ethylene oxide or glycol i in year k of the baseline period expressed in tonnes

$CF_{EOE,i}$ conversion factor for the ethylene oxide or glycol i relative to ethylene oxide

Following conversion factors shall be applied:

Ethylene oxide: 1,000

Monoethylene glycol: 0,710

Diethylene glycol: 0,830

Triethylene glycol: 0,880

Status:
Point in time view as at 19/12/2018.

Changes to legislation:
There are outstanding changes not yet made to Commission Delegated Regulation (EU) 2019/331. Any changes that have already been made to the legislation appear in the content and are referenced with annotations.