WAC 173-442-070 GHG emission reduction pathway and emission reduction requirement for EITE covered parties. Ecology must establish the GHG emission reduction pathway for each EITE covered party using the procedures in this section. A mass-based GHG emission reduction pathway under WAC 173-442-060(1) does not apply to EITE covered parties.

(1) **Production data reporting requirements.** Each EITE covered party must its report annual production data, as specified by ecology, concurrent with their annual GHG report under chapter 173-441 WAC. Production data must be reported for each calendar year in the base-line period and each calendar year with an emission reduction requirement.

(2) **Determine the output-based baseline.** Ecology must calculate the output-based baseline for each EITE covered party. The output-based baseline is calculated once for each EITE covered party and remains constant for all calendar years.

(a) Determine average GHG emissions and production data for the output-based baseline period.

(i) Use the EITE covered party's average emissions and average production data during the 2012 through 2016 period for EITE covered parties with:

(A) Covered GHG emissions averaging greater than or equal to 70,000 MT CO_2e per year during calendar years 2012 through 2016; and

(B) At least three full calendar years of covered GHG emissions reported under chapter 173-441 WAC during that period.

(ii) For all other EITE covered parties, use the EITE covered party's average emissions and average production data during the first three consecutive calendar years after 2012 of covered GHG emissions under normal operations greater than or equal to 70,000 MT CO_2e per year reported under chapter 173-441 WAC.

(iii) The data used for (a)(i) and (ii) of this subsection will not include data for years that would meet the criteria in WAC 173-442-050 (3)(b).

(b) Divide average emissions by average production to get the output-based baseline.

(c) Ecology may adjust the output-based baseline for EITE covered parties based on:

(i) Reported GHG emissions data when the calculation methodology approved under chapter 173-441 WAC changes.

(ii) Updated annual GHG reports or an assigned emissions level under WAC 173-441-086.

(3) **Determine the efficiency improvement rate.** Ecology must calculate the efficiency improvement rate for each EITE covered party. The efficiency improvement rate is calculated once for each EITE covered party concurrently with the output-based baseline and remains constant for all calendar years.

(a) Ecology must calculate an efficiency intensity distribution for each sector with an EITE covered party that meets the requirements in WAC 173-442-030.

(i) Ecology must use the following information to calculate the efficiency intensity distribution for each sector:

(A) GHG emissions data must be comparable to the EITE covered party's data reported under chapter 173-441 WAC or subsection (1) of this section and come from the following sources:

(I) EPA's GHG Reporting Program;

(II) Other national programs;

(III) Trade associations; or

(IV) Other similar sources.

(B) Production data must come from:

(I) EPA's GHG Reporting Program;

(II) National emissions inventory;

(III) Energy information agency;

(IV) Other national programs;

(V) Trade associations; or

(VI) Other similar sources.

(C) If ecology determines no production data or emissions data is available to establish an efficiency intensity distribution for a sector, ecology may use existing benchmarking information for the sector. To use the data, ecology must determine that the benchmark is:

(I) Reasonably current; and

(II) Detailed enough to determine the efficiency intensity distribution.

(D) Ecology must use data from the same time period as the output-based baseline period whenever possible.

(ii) Ecology calculates the efficiency intensity distribution for a sector by using paired GHG emissions and production data to create a ranking of efficiencies for sample facilities in that sector. Alternately, existing benchmarking information is used as described in (a) (i) (C) of this subsection.

(b) Ecology must compare the output-based baseline for each EITE covered party to the efficiency intensity distribution for that EITE covered party's sector to determine the EITE covered party's efficiency improvement rate.

(i) If the EITE covered party's output-based baseline is less efficient than or equal to the twenty-fifth percentile value of the sector's efficiency intensity distribution, then ecology must set the EITE covered party's efficiency improvement rate at a level that would reduce emissions at a rate faster than required to meet the GHG emission reduction pathway that would have been required by WAC 173-442-060 (1)(b)(i). The efficiency improvement rate must not be more than one percent per year of the EITE covered party's baseline GHG emissions value faster than would have been required by WAC 173-442-060 (1)(b)(i).

(ii) If the EITE covered party's output-based baseline is more efficient than or equal to the seventy-fifth percentile value of the sector's efficiency intensity distribution, then ecology must set the EITE covered party's efficiency improvement rate at a level that would reduce emissions at a rate slower than required to meet the GHG emission reduction pathway that would have been required by WAC 173-442-060 (1)(b)(i). The efficiency improvement rate must not be less than one percent per year of the EITE covered party's baseline GHG emissions value slower than would have been required by WAC 173-442-060 (1)(b)(i).

(iii) If the EITE covered party's output-based baseline is between the twenty-fifth and seventy-fifth percentile values of the sector's efficiency intensity distribution, then ecology must set the EITE covered party's efficiency improvement rate at a level that would reduce emissions at a rate consistent with meeting the GHG emission reduction pathway that would have been required by WAC 173-442-060 (1) (b) (i).

(iv) If ecology determines an EITE covered party has not supplied sufficient information to complete this assessment, then the EITE covered party's efficiency improvement rate must be set at a level that

would reduce emissions at a rate faster than required to meet the GHG emission reduction pathway that would have been required by WAC 173-442-060 (1)(b)(i). The efficiency improvement rate must not be more than one percent per year of the EITE covered party's baseline GHG emissions value faster than would have been required by WAC 173-442-060 (1)(b)(i).

(v) If ecology determines that there is not enough information to establish an efficiency intensity distribution for a sector, then EITE covered parties in that sector will be assigned an efficiency improvement rate at a level that would reduce emissions at a rate consistent with meeting the GHG emission reduction pathway that would have been required by WAC 173-442-060 (1)(b)(i).

(4) **Determine the GHG emission reduction pathway.** By January 30 of the second year of each compliance period, ecology will issue a regulatory order as provided in WAC 173-442-200(6) to each EITE covered party with its GHG emission reduction pathway in units of MT CO₂e for each calendar year in the compliance period. Ecology will determine the GHG emission reduction pathway for each compliance period using the following approach:

(a) Calculate the EITE covered party's average production based on reported data for the following time period:

(i) For the 2020 through 2022 compliance period: Use average production data from calendar years 2017 through 2019.

(ii) For EITE covered parties with a first compliance obligation after the 2020 through 2022 compliance period: Use average production data from the three calendar year period prior to their first compliance period with a compliance obligation.

(iii) For all other compliance periods, use average production data from the previous compliance period.

(b) The EITE covered party's GHG emission reduction pathway is calculated using Equation 1.

Equation 1

 $RP_x = (AP \times OB) - (AP \times OB \times ER \times (Y_x - 1))$

Where:

 $RP_x = GHG$ emission reduction pathway for year "x" (MT CO₂e for year "x")

AP = Average production data as specified in subsection (4)(a) of this section (units of production)

 $OB = Output-based baseline as specified in subsection (2) of this section (MT <math>CO_2e/units$ of production)

ER = Efficiency improvement rate as specified in subsection (3) of this section (% as a decimal)

 $\rm Y_x$ = The number of calendar years the EITE covered party has been subject to WAC 173-442-030. The first calendar year is designated as calendar year number one.

(c) Any calendar year containing curtailment recognized by ecology does not count toward the total years in $\rm Y_{\rm x}.$

(d) Beginning in calendar year 2036, Y_x remains constant at the number of years determined for calendar year 2035.

[Statutory Authority: Chapters 70.94, 70.235 RCW. WSR 16-19-047 (Order 15-10), § 173-442-070, filed 9/15/16, effective 10/16/16.]