



DEPARTMENT OF  
**ECOLOGY**  
State of Washington

**Concise Explanatory Statement**  
**Chapter 173-444 WAC**  
**Clean Energy Transformation Rule**

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*Summary of rulemaking and  
response to comments*

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## Publication and Contact Information

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**Concise Explanatory Statement**  
**Chapter 173-444 WAC**  
**Clean Energy Transformation Rule**

Air Quality Program  
Washington State Department of Ecology  
Olympia, Washington

## Acronyms

APA	Administrative Procedure Act
CEAP	Clean Energy Action Plan
CEIP	Clean Energy Implementation Plan
CETA	Washington Clean Energy Transformation Act
Commerce	Washington State Department of Commerce
COU	Consumer-owned utilities
Ecology	Washington State Department of Ecology
EIA	United States Energy Information Administration
EPA	United States Environmental Protection Agency
ETP	Energy Transformation Project
EV	Electric Vehicle
GHG	greenhouse gas
IOU	Investor-owned utilities
IPCC	Intergovernmental Panel on Climate Change
IRP	Integrated Resource Plan
PSE	Puget Sound Energy
PUD	Public Utility District
REC	Unbundled Renewable Energy Credit
RCW	Revised Code of Washington
RTF	Regional Technical Forum
UTC	Washington State Utilities and Transportation Commissions
WAC	Washington Administrative Code
WPUDA	Washington Public Utility Districts Association

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# Introduction

The purpose of a Concise Explanatory Statement is to:

- Meet the Administrative Procedure Act (APA) requirements for agencies to prepare a Concise Explanatory Statement (RCW 34.05.325).
- Provide reasons for adopting the rule.
- Describe any differences between the proposed rule and the adopted rule.
- Provide Ecology's response to public comments.

This Concise Explanatory Statement provides information on the Washington State Department of Ecology's (Ecology) rule adoption for:

Title: Clean Energy Transformation Rule

WAC Chapter(s): 173-444

Adopted date: January 6, 2021

Effective date: February 6, 2021

To see more information related to this rulemaking or other Ecology rulemakings please visit our website: <https://ecology.wa.gov/About-us/How-we-operate/Laws-rules-rulemaking>.

## **Reasons for Adopting the Rule**

The rule implements parts of the Washington Clean Energy Transformation Act (CETA), Chapter 19.405 RCW, which the Washington Legislature passed and the Governor signed into law in 2019. CETA directs Ecology to adopt rules, by January 1, 2021, that:

- Establish requirements for energy-related projects (referred to as energy transformation projects (ETPs)), other than electricity generation, that reduce greenhouse gas (GHG) emissions and fossil fuel consumption. CETA requires Ecology to consult with the Washington State Department of Commerce (Commerce) and the Washington Utilities and Transportation Commission (UTC) in establishing these requirements. Electric utilities may use these ETPs as an alternative compliance option to meet the 2030 GHG-neutral electricity standard required under CETA.
- Determine GHG emission factors for electricity, in consultation with Commerce.

The rule:

- Establishes a process for determining what types of ETPs may be eligible for compliance with CETA.
- Establishes a process and requirements for developing the standards, methodologies, and procedures for evaluating ETPs.
- Provides methods for calculating GHG emissions content in electricity.

The implementation of Part I of the rule provides consistency across electric utilities on how they calculate the GHG emissions in electricity they supply in Washington as they prepare compliance documents for the energy agencies. Part II of the rule provides the mechanism to identify, develop, and evaluate certain energy-related projects that are eligible for compliance under CETA. The implementation of this part of the rule:

- Creates opportunities for electric utilities to invest in ETPs to support them to comply with the GHG-neutral electricity standard required under CETA.
- Provides market incentives for projects. As electric utilities invest in ETPs to benefit from their GHG emission reduction potentials, the ETPs become more economically attractive, increasing the chances of ETPs implementation.
- Assures energy agencies implementing CETA, interested stakeholders, and the public that ETPs meet the requirements and standards of quality that CETA puts into place.

## **Differences between the Proposed Rule and Adopted Rule**

RCW 34.05.325(6)(a)(ii) requires Ecology to describe the differences between the text of the proposed rule as published in the Washington State Register and the text of the rule as adopted, other than editing changes, stating the reasons for the differences.

There are some differences between the proposed rule filed on September 2, 2020, and the adopted rule filed on January 6, 2021. Ecology made these changes for all or some of the following reasons:

- In response to comments received.
- To ensure clarity and consistency.
- To meet the intent of the authorizing statute.

The following content describes the changes and Ecology's reasons for making them.

### **WAC 173-444-040 Greenhouse gas content calculation**

**Subsection (3)** We corrected the reference in (3)(f)(ii)(A) to refer to the subsection establishing the EIA calculation method.

(A) EIA has published electric power data for the power plant or aggregate source consistent with ~~subsection (2)~~(b) and (c) of this subsection; or

**Subsection (5)** We revised the rule text in (5)(b)(ii)(A) to clarify “plant net output” includes utility claims measured at the busbar.

(A) Utility claims are reported on a plant net output basis, like utility claims measured at the busbar; or

### **WAC 173-444-060 Eligible categories of energy transformation projects**

**Subsection (6)** We corrected the reference in subsection (6) to refer to the subsection establishing the conditions that a project must meet to be eligible as energy transformation project.

(6) In addition to the conditions in subsection (~~4~~5) of this section in order for a project category to be included in this list, potential projects that may fall under that category must not:

**Subsection (11)** We corrected the reference in subsection (11) to refer the subsections establishing the positive and negative conditions that a project must meet to be eligible as energy transformation project.

(a) Evaluate whether the requested additional or modified categories meet the conditions established in subsections (~~4~~5) and (~~5~~6) of this section; and



## **List of Commenters and Topics**

Ecology accepted public comments on the proposed rule between September 2 and October 14, 2020. We included the comments verbatim as received under each topic, with minor edits for clarity. You can see the original content of the comments we received at [our online comment website](#).<sup>1</sup> These comments remain available online for two years after the rule adoption date.

We organized the comments and responses by grouping them together by topics. Under each topic heading, we included all the public comments that Ecology received on that topic, followed by our summary response that addresses all the comments on that topic.

### **Topic Lists**

We classified all the comments into the following topics to group comments together:

- Adherence to timeline and process in rule
- Burdensome validation and verification
- Citation of the source of the 5% transmission loss
- Clarification on treatment of biogenic emissions
- Clarification on emissions from known sources
- Clarifications of terms and phrases
- Consideration for implementability of ETPs
- Criteria for protocol development
- Electric vehicle charging stations ownership and additionality
- Emissions from electricity storage facilities
- Extending deadline for GHG emissions reporting
- Including upstream emissions
- Indirect emissions
- Initial list of eligible project categories
- Revision of Global Warming Potential values
- Pre-2030 implementation of ETPs

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<sup>1</sup> <http://aq.ecology.commentinput.com/comment/extra?id=DNfCV>

- Public participation during project validation
- Support for the proposed rule
- Unspecified electricity emission factor update

## List of commenters

We classified all the comments submitted by each commenter according to the topic they addressed.

<b>Affiliation</b>	<b>Commenter name</b>	<b>Topics where comments were assigned</b>	<b>Associated comment numbers</b>
<b>Individual</b>			
Stenhouse, Angela	Stenhouse, Angela	Support for the proposed rule	I-1-1
<b>Business</b>			
Avista Utilities	Booth, Kevin	Clarification on treatment of biogenic emissions	B-3-2
Avista Utilities	Booth, Kevin	Clarification on emissions from known sources	B-3-3
Avista Utilities	Booth, Kevin	Extending deadline for GHG emissions reporting	B-3-1
Cowlitz Public Utility District No. 1	Taylor, Steve	Unspecified electricity emission factor update	B-1-2
Cowlitz Public Utility District No. 1	Taylor, Steve	Burdensome validation and verification	B-1-3
Cowlitz Public Utility District No. 1	Taylor, Steve	Clarifications of terms and phrases	B-1-1
Cowlitz Public Utility District No. 1	Taylor, Steve	Criteria for protocol development	B-1-4
Klickitat. PUD, Douglas PUD, and Renewable Hydrogen Alliance	Warren, Dave	Initial list of eligible project categories	B-4-1
Klickitat. PUD, Douglas PUD, and Renewable Hydrogen Alliance	Warren, Dave	Burdensome validation and verification	B-4-2
Puget Sound Energy	Rendina, Brett	Unspecified electricity emission factor update	B-2-1
Puget Sound Energy	Rendina, Brett	Extending deadline for GHG emissions reporting	B-2-3

*CES for Clean Energy Transformation Rule*

<b>Affiliation</b>	<b>Commenter name</b>	<b>Topics where comments were assigned</b>	<b>Associated comment numbers</b>
Puget Sound Energy	Rendina, Brett	Adherence to timeline and process in rule	B-2-2
Snohomish PUD	McIsaac, Clark	Burdensome validation and verification	B-5-3 , B-5-1
Snohomish PUD	McIsaac, Clark	Initial list of eligible project categories	B-5-2
<b>Organization</b>			
Climate Solutions	Gutman-Britten, Vlad	Including upstream emissions	O-3-2
Climate Solutions	Gutman-Britten, Vlad	Emissions from electricity storage facilities	O-3-1
Climate Solutions	Gutman-Britten, Vlad	Consideration for implementability of ETPs	O-3-5
Climate Solutions	Gutman-Britten, Vlad	Pre-2030 implementation of ETPs	O-3-6
Climate Solutions	Gutman-Britten, Vlad	Initial list of eligible project categories	O-3-3 , O-3-4
Connecticut Green Bank	Macunas, Matt	Electric vehicles charging stations ownership and additionality	O-5-1
NW Energy Coalition	Bosh, Joni	Including upstream emissions	O-4-1
NW Energy Coalition	Bosh, Joni	Revision of Global Warming Potential values	O-4-3
NW Energy Coalition	Bosh, Joni	Citation of the source of the 5% transmission loss	O-4-2
NW Energy Coalition	Bosh, Joni	Clarifications of terms and phrases	O-4-4
NW Energy Coalition	Bosh, Joni	Initial list of eligible project categories	O-4-5
NW Energy Coalition	Bosh, Joni	Public participation during project validation	O-4-6
Solar Installers of Washington	Will, Bill	Burdensome validation and verification	O-2-1
WPUDA	Garcia, Nicolas	Unspecified electricity emission factor update	O-1-2
WPUDA	Garcia, Nicolas	Burdensome validation and verification	O-1-1
<b>Other</b>			
NAVFAC Northwest	Hamilton, Matthew	Indirect emissions	OTH-1-1

## **Comments and Responses:**

We organized the comments and responses by grouping them together by topics. Under each topic heading, we included all the public comments that Ecology received on that topic, followed by our summary response that addresses all the comments on that topic.

### **Adherence to timeline and process in rule**

#### **Commenter: Brett Rendina, Puget Sound Energy (PSE) - Comment B-2-2**

*Ecology must ensure that the proposed public process for determining eligible categories of ETPs adheres to clear timelines and processes.*

PSE highlights the importance of clear timelines and comment for the proposed process for determining eligible categories of ETPs. In concept: PSE is not opposed to the proposed public administrative process that occurs outside of a formal rulemaking process. However, it is crucial that Ecology ensures the process runs smoothly and as intended in the rule. ETPs are an important component of the law, and were intended to provide a means of alternative compliance that should be realistically available to utilities. Although utilities will not need to demonstrate compliance with CETA's GHG neutral standard until 2030 and beyond, utilities and stakeholders do need reasonable certainty in the near term about what projects can be considered. PSE therefore forward to a robust and timely public process for examining and determining eligible ETP categories and other protocols.

#### **Response to B-2-2**

As recognized in the comment, the rule establishes the general standards, requirements, process, and timeline for eligible project identification to provide certainty to stakeholders. Ecology expects to identify the eligible project categories through the public participation process and timeline laid out in the rule.

### **Burdensome validation and verification**

**List of commenters:** Cowlitz Public Utility District No. 1, Dave Warren (for Renewable Hydrogen Alliance, Klickitat PUD, and Douglas PUD), NW Energy Coalition, Solar Installers of Washington, Snohomish PUD, Washington Public Utility Districts Association (WPUDA),

#### **Commenter: Joni Bosh, NW Energy Coalition - Comment O-4-7**

The proposed rules rightly require the projects be validated prior to implementation, monitored while functioning; and performance and outcomes verified to assure the actual benefits of the project over time. This is crucial, as the statute allows for no more than 20% of the 2030 standard to be met with ETPs, which should in actual practice move the state towards a cleaner grid.

**Commenter: Dave Warren for Klickitat PUD, Douglas PUD, and Renewable Hydrogen Alliance - Comment B-4-2**

We do continue to express our concern about the administrative burdens contained in the draft rule for verifying investments in, and receiving compliance credit for energy transformation projects (ETPs). ETPs start with an administrative disadvantage against the other two alternative compliance options, either the administrative penalty equivalent or purchase of renewable energy credits (RECs). Neither of the other two options require additionality, verification, permanence, "not reasonably assumed to occur absent additional funding in the near future", and other requirements for ETPs. Adding the risk of uncertainty and administrative burden contained in the 10 pages of these rules for ETPs will almost certainly inhibit, if not dry up consideration of any investments by utilities in ETPs.

Accordingly, we request Ecology reconsider every aspect of this rule and streamline where possible the administrative requirements in this draft. Utilities reviewing alternative compliance options including investing in ETPs are highly regulated, with robust public participation processes, including for intervenors with technical experts scrubbing every item in a utility's Integrated Resource Plan, Clean Energy Action Plan, and Clean Energy Implementation Plans.

We endorse the WA PUD Association's request for Ecology to adopt a modified regulatory approach modeled on the Regional Technical Forum used by the Northwest Power and Conservation Council to assess energy conservation and efficiency measures. For virtually all the listed ETPs, experts from around the state could meet and develop a common set of standards.

In addition, the adding of additional third party verification processes for planning and post-acquisition of ETPs on top of the multiple layers of current regulatory processes that include public review of utilities plans, acquisitions and compliance with law is one layer of administrative burden that is unnecessary and will only add costs and uncertainty.

We request amending language as follows to accomplish some easing of the burden, while not sacrificing any verification of ETPs Compliance credits (and this section addresses project plans, including for efficiency and conservation resources, which are already adopted by the Regional Technical Forum as discussed above):

WAC 173-444-070(3)(j)(i)

"Demonstration or attestation of commitment to ~~third party~~ appropriate regulatory verification of the project ....."

WAC 173-444-080(8)

(14) After a project is approved by the applicable approving body, and after the project comes into existence and is functioning, the electric utility must ensure, using existing regulatory compliance procedures specific to investor-owned and consumer-owned utilities respectively that:

- a) Proper monitoring of the benefits of the project occur over time. The manner and means by which this monitoring may vary between project types, and will be detailed in the comprehensive protocol.
- b) The benefits of the project are being reported over time to one or more bodies. The manner and means by which this reporting occurs will be detailed in the comprehensive protocol.

(15) After a project is approved by the applicable approving body, and after the project comes into existence, the electric utility must conduct or facilitate a performance verification process to verify the actual benefits of the project over time to the appropriate approving body using existing compliance practices and procedures. The manner, timing, and means by which this performance verification occurs may vary from project type, and will be detailed in the comprehensive protocol. [Delete to the end of the section] ~~but will, at a minimum, require that:~~

~~(a) Third party verifier, or the firm employing the verifier or verifying team, must be accredited by at least...~~

These changes are modest, and will reduce the number of regulatory oversight processes from five (adding a layer of third party verification in the planning stage and after-the-fact compliance practices) to three (development of the IRP and CEAP with public review and participation, approval of the Plans by the approving body, and after-the-fact and approval of compliance with requirements of law) without reducing the oversight, transparency and accountability.

**Commenter: Steve Taylor, Cowlitz PUD - Comment B-1-3**

*Energy Transformation Project Protocols and Procedures*

The PUD previously expressed concerns over the complex nature of the draft rule's treatment of energy transformation projects (ETP), specifically pertaining to the development of project category protocols and implementation procedures for individual projects. While we appreciate the Department's inclusion in Section -060(7) of an initial list of eligible project categories pertaining to the electrification of the transportation sector, we are concerned the language remains overly cumbersome and will likely discourage utilities from pursuing innovative transformation projects in favor of purchasing unbundled RECs to achieve alternative compliance with CETA's clean energy standards.

By way of example, the proposed rule provides two pathways for project validation: third-party verification or Ecology review. The former path will result in substantial validation costs while the latter will consume significant time, add elements of uncertainty and allow a public input period that is duplicative of the process previously afforded by the rule during the comprehensive protocol development phase. The utility will sink considerable time and expense into project development for even the most basic ETP (e.g., EV purchase rebate program) without tangible certainty that the project will achieve validation by Ecology or the third-party verifier. Uncertainty over project scope and the amount of fossil fuel reduction that can be validated

through an ETP makes it difficult for utilities to achieve an adequate return on investment compared to the compliance certainty they would gain by purchasing unbundled RECs.

The PUD encourages Ecology to streamline the project application and validation procedures to encourage and promote ETP development by utilities.

**Commenter: Clark Mclsaac, Snohomish PUD - Comment B-5-1**

WAC 173-444-070(3)(j): The structure and form of verification of Energy Transformation Project benefits create unnecessary investment barriers to ETPs

Ecology outlines a specific methodology requiring the verification of ETPs before their operation, as well as requiring verification of benefits in their comprehensive protocol after the ETP is operating. This process mandates a third-party verification to monitor the ongoing benefits of an ETP.

The costs associated with a third-party verification procedure can present projects with significant additional costs. This is especially true if third-party verification is required over several years. Utilities will examine the economic viability of potential ETPs, which will be compared against similarly priced alternatives - the costs associated with ongoing third-party verification could change the economics of an ETP, resulting in an otherwise lowest cost option not being adopted. Further, securing a third party with the proper experience and knowledge that falls under Ecology's outlined expertise requirements could be challenging, depending on the nature of the ETP.

Ecology should consider establishing standardized eligible project types and emissions savings on a per unit basis in order to add certainty and reduce soft cost of ETPs. ETPs are expected to compete with low-cost RECs for compliance value. Any uncertainty, soft costs, or transaction costs added by prescriptive rules reduce the likelihood that ETPs will be a viable investment for utilities. Specifically, this uncertainty presents a barrier for planning for ETP investment on a long-term planning basis, which values cost and risk certainty in balancing possible investment paths. The process is likely to devalue small-scale projects that may have greater community benefit than a large-scale project due to the proportion of soft costs incurred by the verification process.

**Commenter: Clark Mclsaac, Snohomish PUD - Comment B-5-3**

The framework for deemed savings in the Energy Efficiency industry in the Pacific Northwest may offer a viable framework for standardized ETP project types to increase the probability of ETP investments.

The proposed approach for project verification through custom verification and project establishment, outlined in Ecology's proposed rules, makes it difficult for a utility to demonstrate to its customers that ETP investment will be more cost-effective than alternative mechanisms for CETA compliance. This is because there is uncertainty as to how different projects might be evaluated and by whom, what regulatory compliance value they may have as a result, and what soft costs may be required for project establishment and verification.

Deemed savings for utility conservation projects could serve as a model for standardizing common ETPs. In this model: a single third party establishes the deemed first-year energy savings for common conservation measure for the region based on a standardized measurement, publishes the results in a Technical Reference Manual (TRM, established by the Regional Technical Forum in the Pacific Northwest), and utilities reference those shared standards in evaluating the potential energy savings from a given level of investment available within their service territory with a given useful life. The use of a TRM for common measures does not preclude the establishment of customer energy savings measures for non-standard conservation measures.

Standardizing carbon savings on a per measure basis for common project types using a model like deemed savings in the energy efficiency industry: would reduce project costs: allow utilities to plan for potential investment with less uncertainty, and increase the speed with which investment in common projects could be accomplished.

**Commenter: Bill Will, Solar Installers of Washington - Comment O-2-1**

Solar Installers of Washington is concerned that the provisions of this section that mandate third party verification in both the planning and implementation of ETP projects will produce cost burdens that will discourage electric utilities from using these projects to meet CETA targets.

Both in the design of the ETP criteria themselves in the draft rules as well as the current regulatory schema, other agencies (Commerce, UTC and the governing boards of public electric utilities) already have robust processes in place to ensure approved ETPs meet specific carbon reduction targets and overall CETA goals as well as comply with the existing regulatory framework. A duplicative layer of third party review may both slow implementation of ETPs by electric utilities and skew their internal cost calculations in a way that undermines their feasibility as a CETA compliance mechanism.

ETPs are designed to foster creative, innovative and cost-effective ways to reduce greenhouse gas emissions. An appropriate but less burdensome regulatory approach would help unleash that potential and meet the Legislative intent of "significant and swift" GHG emissions.

**Commenter: Nicolas Garcia, WPUDA - Comment O-1-1**

As previously noted in WPUDA's May 26, 2020 letter to Ecology, WPUDA actively participated in the legislative effort to craft CETA. It remains WPUDA's understanding that the Legislature's intent for CETA was to provide a workable path to transition to clean energy (RCW 19.405.010(1)), create family wage jobs (RCW 19.405.010(2)), encourage alternative clean energy sources (RCW 19.405.010(4)), and achieve additional, quantifiable, permanent and enforceable emissions reductions with ETPs (RCW 19.405.040(1)(b)(iii)). Achieving such a diversity of objectives requires careful balancing by regulating agencies. Unfortunately, WPUDA believes that in their current form Ecology's proposed rules tip the scale too far towards demonstrating certainty of emissions reductions. The proposed rules are so onerous and expensive, including third-party verification at two separate stages of the review process, that utilities are unlikely to pursue ETPs. Instead, they are likely to rely on other alternatives such as



renewable energy credits to comply with the 2030 carbon neutral mandate. Consequently, the jobs and other economic benefits of ETPs will fail to materialize. Therefore, we ask, once again, that Ecology consider a more collaborative, less cumbersome approach such as that used by the Regional Technical Forum (RTF) to assess and verify energy efficiency measures. Simplifying and balancing the process with full consideration of all legislative directives will, perhaps, allow ETPs to be viable alternatives for achieving carbon neutrality as intended by the legislature.

### **Response to B-1-3, B-4-2, B-5-1, B-5-3, O-1-1, O-2-1, and O-4-7**

A large number of the comments related to ETPs received throughout this rulemaking address the issue of administrative complexity. This is an important topic, and deserving of the significant attention it has received. Balancing the administrative burden of a rule with the legal requirements of the underlying statutory authority is a cornerstone of both the Ecology and State of Washington rulemaking processes. Ecology must achieve a balance, but Ecology does not have the authority to ignore the law because the law burdens an affected party.

Broadly stated, the comments regarding the administrative complexity of the proposed rule fall into four key topic areas, each of which has a set of proposed remedies. These remedies are:

- Ecology should ignore statutory language establishing criteria for ETPs.
- Ecology should create an entity that can package ETPs to ensure conformity with the statute.
- Ecology should eliminate verification steps to reduce costs and complexity.
- Ecology should ensure that the costs of ETPs are similar to other alternative compliance options.

We discuss each of these key topic areas below, but it is important to acknowledge that all of these topic areas are linked. Fundamentally, the Legislature has asked Ecology to devise standards, procedures, and mechanisms that allow the appropriate approving bodies (i.e., the governing boards of consumer-owned utilities (COUs) or the UTC) to evaluate ETP proposals. Ecology has not proposed that it is in and of itself an approving body in regards to the compliance status of ETPs. Nonetheless, the Legislature has clearly contemplated and explicitly assigned a role to Ecology in regards to ETPs. This rulemaking has attempted to define that role. That role is to ensure a level of consistency in the types of ETPs that are implemented by all utilities (both COUs and investor-owned utilities (IOUs)), and in the manner that the criteria established in law are interpreted and applied by all utilities.

#### **Inclusion of All Criteria in CETA Statute in Requirements for ETPs**

A consistent criticism of this rule development process is that the rule has attempted to implement the law as written, and in full. Specifically, several commenters have

argued that only some of the criteria identified in, for example, RCW 19.405.040(2), (3), and (4) should be included in the rule, rather than all of the criteria in the law. They assert that the rule should address only the statutory criterion of being “quantifiable,” as accomplished through the specification of appropriate emission factors. Others have identified additional criteria they see as being useful or appropriate, but object to the inclusion of other criteria, e.g., the need for projects to prove that they are additional. A common theme to the arguments presented is that portions of the statutory intent language from the legislation is inconsistent with the application of these criteria, and therefore we should ignore the statutory language that includes these criteria in whole or in part.

Ecology does not have the authority to ignore portions of the law or to choose which aspects of the law to follow. We can choose not to include some aspect of a law in a rule when the statute provides clear and specific direction that negates the need for additional detail or process in rule because the law and rule work together. However, especially where an itemized list of relevant items is part of the law under the same clause, or related clauses, it would be arbitrary for Ecology to select some of those items to include, and not others. The Legislature has determined applicable criteria to ETPs under RCW 19.405.020(18) and RCW 19.405.040, and Ecology does not have the option of picking some of those statutory criteria and not others. As such, Ecology has chosen to address all of the criteria the Legislature has designated as being necessary for ETPs by including all of them in the establishment of the requirements for ETPs, consistent with RCW 19.405.100(7).

#### Creation of an ETP Administrative Entity

A number of commenters have suggested that Ecology establish an administrative entity to package ETPs to allow categories of ETPs to be presumptively approvable. In other words, to simplify matters so a utility knows that if they invest a given amount into a type of ETP, that it will result in a given amount of energy in megawatt hours (MWh) that can be counted toward compliance with CETA. Commenters have pointed to the specific example of the Regional Technical Forum (RTF), managed by the Northwest Power and Conservation Council (NWPCC), on several occasions. The RTF is a body that would provide the region with consistent and reliable quantification of energy savings estimates for specific efficient technologies or actions.<sup>2</sup> Generally, the RTF has been successful in creating consensus across utilities and utility types as to how to quantify and credit energy efficiency projects.

In principle, Ecology agrees that an administrative body could be established for the sole purpose of parsing the technical details associated with ETPs, writing appropriate protocols, providing technical assistance, and so forth. In the carbon market world, carbon registries accomplish these objectives. Carbon registries have a quasi-public role in packaging GHG reduction projects for use in both regulated and voluntary

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<sup>2</sup> <https://rtf.nwcouncil.org/>

carbon markets. The RTF is somewhat analogous to these entities, although with a more limited role since it deals solely with energy efficiency.

The RTF plays a more similar role to what CETA mandates for ETPs as their benefits have to be measured ultimately in terms of megawatt-hours of clean energy if they are to serve a compliance purpose in CETA, even though ETPs have a greenhouse gas reduction component. So a carbon registry “packages” GHG emission reductions, but an analogous body in CETA needs to “package” units of clean energy that utilities use for compliance purposes.

However, CETA did not provide Ecology the authority to establish a dedicated administrative body to serve ETPs. Given the relatively small role that Ecology plays in the overall CETA structure, it is also not clear that Ecology would be the appropriate home for such an entity. Before embarking on such a major task clear direction from the Legislature would be desirable. Nor did the Legislature provide any funding or resources for establishing such an entity. The annual budget for the RTF is currently about 2 million dollars a year, and the RTF addresses only one type of project category (energy efficiency). One can imagine an analogous organization for ETPs would need even more resources and broad authority to address additional categories of projects, like transportation sector projects.

Finally, it is important to acknowledge that the rule provides similar opportunities for the creation of standardized methods and quantification processes as the RTF process through the rule’s protocol development stages. We can achieve a similar level of consistency in application for categories of ETPs through that process. Given resource constraints, it is unlikely that Ecology will be able to bring in the number of technical consultants often engaged in the RTF processes. However, Ecology should be able to provide a venue for a debate on appropriate protocols and standards, and the protocol development process should be able to provide utilities with a common understanding and platform to move forward with ETPs in the coming years.

#### The Necessity for Validation and Verification of ETPs

As noted above, utilities must address all of the ETP criteria in CETA. The rule continues to assume that utilities or project proponents (or some combination) will be addressing the ETP criteria and confirming project benefits over time. Numerous concerns have been brought up regarding the administrative burden of the rule in terms of the requirements for documenting how the project meets the ETP criteria (i.e., project validation) and the need for post-project confirmation of the project benefits (project verification). Ecology does recognize that each of these two steps will have impacts on utilities. Moreover, we very much appreciate the useful input and discussion on this topic throughout the rulemaking process. Historically, this topic has been central to the development of many other project-based policy programs in areas as diverse as wetlands mitigation and energy efficiency.

The CETA statute explicitly requires ETPs to be verifiable, and directs Ecology to establish “verification procedures” and “reporting standards” (RCW 19.405.100(7)). Therefore, Ecology does not agree with the comments that propose to eliminate the validation and verification requirements, and indicate that there was no legislative intent for Ecology to play a role in this regard. Nonetheless, the nature of this

verification is subject to varying interpretations. The difference in the terminologies used in the rule reflects the difference between the two stages of the process. The validation of project plans is by intention a less precise or prescriptive process than the verification of project benefits that occurs once an ETP has come into being. The goals of the two different processes also reflect this difference.

The creation of a project plan as outlined in the rule is an opportunity for a utility to explain how the proposed ETP meets the requirements of the law. Moreover, requiring that this explanation follow a consistent format promotes transparency to the public, approving bodies, and other interested parties. This requirement also reflects the needs of other state agencies involved in CETA that we consulted during this rulemaking, including the UTC and the Office of the Washington State Auditor.

The validation process outlined in the rule requires that the entity conducting the validation process ensure that the project proposal “conform” to the relevant sections of the comprehensive protocol for ETPs that is developed through the rule. In doing so, this process ensures a good-faith effort is made to demonstrate how each of the ETP criteria is being satisfied by the proposed project. It ensures that all of the ingredients for making that decision are included in the project plan, and that the project plan provides the evidentiary basis for demonstrating that the project is capable of meeting the requirements of the protocol and any supporting documents referenced in the protocol. By ensuring that all of those “ingredients”, i.e., all of the information and elements necessary for the approving body, are included it also helps to ensure that the project can be audited if necessary, and it helps the public to understand the nature and implications of the project.

We intend the project verification that will occur after the ETP is implemented to be a more rigorous exercise. The use of third-party verification for this is consistent with project-based programs in a number of areas, but especially with energy efficiency programs in the Pacific Northwest. Utilities are already accustomed to having their energy efficiency programs and projects subject to third party verification, and this rule simply extends that traditional practice to a wider range of energy projects. Because the project benefits (e.g., greenhouse gas reductions, fossil fuel usage reductions, etc.) of ETPs at this stage will be directly counted toward compliance with CETA (since their approving bodies have approved them at this stage), it is important that the credit they receive toward compliance be based on real world, measured, and reported performance rather than estimates. Furthermore, it is important that there is broad public and regulatory confidence in the reported results from ETPs, which is the primary purpose of third party verification.

#### The Costs of ETPs Relative to other Alternative Compliance Options

Another frequent comment in the rulemaking process has been that Ecology should ensure that ETPs have a cost structure that allows them to compete with the other alternative compliance options, noting that if they cannot compete with unbundled renewable energy credits (RECs) then utilities are unlikely pursue ETPs as a compliance option. Ecology agrees that given the significant hurdles for ETPs to qualify under CETA, they are likely to be a relatively high cost option for utilities.

Ecology also agrees that it is likely that unbundled RECs may be a more attractive vehicle for compliance in many cases.

There is no mandate or direction in the CETA statute requiring us to disregard provisions of the CETA statute because following the law may result in more expensive compliance options. Like the comments provided on the inclusion of the statutory ETP criteria in the rule, some commenters point to the legislative intent language as a signal that the Legislature did not intend to make implementing ETPs as complex of an endeavor as they are likely to be. However, as with the prior discussion, Ecology believes the best indicator of legislative intent is the actual statutory language, even if that law places a significant administrative burden on ETPs to demonstrate their credibility and applicability to the law.

The assertion that each of the alternative compliance pathways should be equally viable from a financial perspective lacks evidence in the statute. Although the purchase of unbundled RECs may have a lower administrative cost relative to ETPs, the payment of the administrative penalty will most likely have the lowest administrative overhead burden (even if the penalty itself is high). Whether or not that administrative penalty option is financially viable will vary based on the costs of unbundled RECs and of ETPs. Surely, those costs will vary over time, and potentially be significantly different from each other. Again, there is no statutory language, or hints of intent, that the various alternative compliance options are by design of the legislation required to be cost competitive with each other.

Finally, some commenters have said that ETPs are inherently disadvantaged in competing against unbundled RECs because ETPs must meet all of the various ETP criteria identified in the law, and unbundled RECs do not. However, unbundled RECs used for CETA are also required to meet a similar regimen of criteria, most of which are identical to those that ETPs are required to meet. The difference is those criteria are addressed through the Western Renewable Energy Generation Information System (WREGIS) certification process and the guarantees that system ensures.

For example, ETPs are required to be additional, i.e., to have only come into existence because of the utility investment in that project. For unbundled RECs, WREGIS guarantees that additionality, i.e., that incremental bit of renewable energy (as represented by the REC) only emerges into the world due to a utility procuring that unbundled REC and retiring it for compliance purposes. Similarly, that REC is enforceable, because the Washington State is the administrator for RECs eligible for compliance for Washington State renewable energy programs.

## **Citation of the source of the 5% transmission loss**

### **Commenter: Joni Bosh, NW Energy Coalition - Comment O-4-2**

The source of the base data for the 5% transmission loss factor, whatever its final value, needs to be cited in a footnote.

## **Response to O-4-2**

Ecology consulted with experts at Commerce to determine the 5% transmission loss value. The experts calculated this value based on existing fuel-mix disclosure reports under Chapter 19.29A RCW.

## **Clarification on treatment of biogenic emissions**

### **Commenter: Kevin Booth, Avista Utilities - Comment B-3-2**

*Calculation methodology for electrical power generation facilities using biomass as a fuel.*

The treatment of biogenic CO<sub>2</sub> in WAC 173-444-040(2)(b) states that "...The total must include all reported GHGs, including biogenic CO<sub>2</sub>, listed in Table A-1 of WAC 173-441-040 converted into CO<sub>2e</sub> as specified in that section". Section 173-444-040(2)(g)(iii) states to only use the EPA methodology if ...."Published EPA GHG emissions for the power plant must not include any biomass energy". Could you confirm which of the GHG calculation methods listed in the proposed rule would be used for electrical power generation facilities using biomass as a primary fuel?

### **Response to B-3-2**

Biogenic is an emissions category, whereas biomass is a fuel category. The term biogenic is included in the rule primarily to address emissions from waste to energy facilities, where we do not consider the fuel biomass under the CETA statute. However, EPA's GHG Reporting Program established under 40 C.F.R. Part 98 as adopted by Chapter 173-441 WAC might consider some emissions biogenic. Emissions from the combustion of biomass, such as wood, would be ineligible for the EPA calculation method and would need to be calculated using the EIA method.

## **Clarification on emissions from known sources**

### **Commenter: Kevin Booth, Avista Utilities - Comment B-3-3**

*Calculation methodology for purchased power from known sources.*

Avista also purchases large amounts of electric power for resale. Usually, these purchases represent a fraction of the total annual output of the generating source. Although EIA data is typically available for these sources, additional clarity in WAC 173-444-040(3), EIA Methodology, would be helpful when calculating the GHG content of electric power purchased from these sources. Clarification for applying the transmission line loss factor for these sources would also be helpful.

### **Response to B-3-3**

Utilities should use the EIA methodology taking into account the MWh electric power purchased. Utilities would calculate transmission losses for EIA sources the same way as

for other methods. If the electricity purchased for resale is measured at the busbar of the power plant, then the transmission loss should be calculated according to WAC 173-444-040(5)(b)(ii)(A).

## **Clarifications of terms and phrases**

**List of Commenters:** Cowlitz Public Utility District No. 1, NW Energy Coalition

### **Commenter: Steve Taylor, Cowlitz PUD No. 1 - Comment B-1-1**

#### *Greenhouse Gas Content Calculation*

The PUD is generally supportive of the proposed language pertaining to the greenhouse gas content calculation methodology and thanks the Department for the changes it made to the previous drafts in response to utility stakeholder comments. However, we continue to disagree with the inclusion of a requirement to account for transmission losses as those losses occur in the wholesale rather than retail space, as CETA compliance is based upon a utility's retail electric sales to its customers. We appreciate the inclusion of factors in Section -040 (5) (b) that allow most utilities to report transmission losses as "zero MWh," but we still do not understand the purpose of their presence in relation to CETA's stated requirements.

The PUD offers a suggestion to improve clarity in determining the applicability of Section -040 (5) (b) to a utility's GHG content calculation by adding the term "plant net output" to Section -020 Definitions.

### **Commenter: Joni Bosh, NW Energy Coalition - Comment O-4-4**

There are a few definitions we strongly urge added to the definitions section:

- **"Asset Controlling Supplier"**: California is the only state that has created such a designation and this term needs to be clearly defined, rather than simply referenced in the definition of "aggregate source". For example, *"Asset Controlling Supplier" means a utility that is so designated by the California Air Resources Board because the utility sells energy from more than one source into California and for which electricity resource mix the CARB establishes a single emissions rate.*
- **"Approved Alternative Data Source"**: This term is found in all the equations. It is not clear, if an alternative data source is limited to CARB and its emission determinations for Asset Controlling Suppliers or if the term is broader and is intended to allow other "data sources" of emissions to be used in the equations as well.
- **"Greenhouse gas emission content"**: means a calculation expressed in carbon dioxide equivalents made by the department of ecology for the purposes of determining the complete greenhouse gas life cycle emissions in electricity attributable to a fuel, including emissions resulting from the extraction, production, transport and complete combustion or oxidation of fossil fuels.

- "Plant net output basis": This term is used only once in the rules at WAC 173-444-040(5)(b)(ii)(A). It needs to be distinguished from both "sales basis", which is used once the same section, and from "plant net electric generation" (as used on pages 6, 7 and 9).
- "Utility Claims": It is not clear how this term differs from "plant net electric generation" or from "total claims" in (total claims is only used once in the rules and it is not clear to what amount of electricity it refers). Does this term include partial output of a known generator (for example, a utility purchases just half of the output of a specified natural gas generator)? If "utility claims" it is meant to capture MWhs of specified purchases from generators that are not owned by the utility, that should be part of the definition.

## **Response to B-1-1 and O-4-4**

To avoid unintentional discrepancies, Ecology refers to existing terminology and definitions in other regulations where possible, rather than redefining terms in this rule. For example, referencing the California Air Resources Board for the definition of an "asset-controlling supplier" and referencing the Fuel Mix Disclosure program for the term "utility claims".

The regulating agency, not Ecology, can approve alternative data sources, and therefore this rule will not specify the standard for the alternative sources.

For clarity, we updated the meaning of "plant net output" in 173-444-040(5)(b)(ii)(A) as:

(A) Utility claims are reported on a plant net output basis, like utility claims measured at the busbar; or

## **Consideration for implementability of ETPs**

### **Commenter: Vlad Gutman-Britten, Climate Solutions - Comment O-3-5**

#### *Ensuring implementability of ETPs*

Climate Solutions looks forward to engaging in future discussions outlined in the proposed rules regarding ETP categories. To maintain the integrity of the greenhouse gas neutral standard, it is critical that the Department rigorously evaluate additionality of any category, both individually and in combination with other proposed categories.

Climate Solutions appreciates the Department's attention to enforceability and ongoing monitoring of ETPs claimed by utilities. While we support the accountability built into these measures, we want to ensure that utilities as much as possible are able to pursue ETPs compared to other alternative compliance mechanisms like RECs. In particular, it is possible to envision implementation difficulties when providing credit for certain kinds of decentralized emission reductions, like electric vehicle incentives, where ongoing tracking of a vehicle's location, use and ownership is difficult. These types of projects and programs will be valuable contributions to



Washington's decarbonization pathway, and utilities should be able to opt into using those categories with an assurance that they will be able to reasonably comply with their requirements.

### **Response to O-3-1**

Ecology agrees with the comment. Additionality is required by CETA, and is clearly included in the provisions and requirements set forth in this rule. We made every effort to establish processes that address the minimum requirements of CETA while allowing for the possibility of electric utilities to implement important new project types. However, Ecology does not have the option of allowing electric utilities to forego requirements that are set in the CETA statute. Nonetheless, as described in the rule, Ecology has made a commitment to ensure that we can make some form of electric vehicle charging credit mechanism work within the context of CETA. We will continue to make every effort to meet the requirements in the law and rule, including additionality, during the identification of eligible projects through the public involvement process established in the rule.

## **Criteria for protocol development**

### **Commenter: Steve Taylor, Cowlitz PUD No. 1- Comment B-1-4**

Ecology should focus its efforts in the near term on determining the GHG-reduction conversion rates for the project categories that were specified in the CETA statute.

### **Response to B-1-4**

Ecology will be working on identification of eligible project categories as per the rule. Once we identify the eligible project categories, Ecology will start working on the comprehensive protocol development for the identified eligible project categories. We will establish the conversion factors to estimate the clean energy benefits of ETPs based on the GHG benefits of projects as part of the comprehensive protocol.

## **Electric Vehicle Charging Stations ownership and additionality**

### **Commenter: Matt Macunas, Connecticut Green Bank - Comment O-5-1**

The Green Bank applauds states taking action toward securing a clean energy future and confronting climate change. Through this input, we seek to clarify how CETA might be improved to not inadvertently create a disinvestment where it intends to create investment. This draft makes great efforts toward providing definition around additionality for Energy Transformation Projects ("ETPs"); however, matters involving the double counting of carbon credits could use greater definition.

There are currently organizations including the Green Bank that transact the carbon value from electric vehicle ("EV") charging in private, voluntary carbon markets. In doing so, we

collaborate with the owners of those chargers' environmental attributes. CETA is an impressive draft rule, but there is problematic language regarding ETP additionality and the basis upon which utilities would take ownership of EV charging systems' GHG reductions as eligible ETPs for CETA compliance purposes. Specifically, it suggests that EV charging investments may have their carbon market value - derived through greenhouse gas ("GHG") emissions reductions - automatically annexed as ETPs to the upstream entities CETA proposes to regulate. This would create a takings issue that is preferable to resolve in advance through this initial rulemaking.

For example, although additionality requires utilities to provide additional funding, in parts of the CETA draft rule it is not clear if the utility owns the EV charging GHG reductions as a result of the fact that:

- a) the chargers simply operate on their electric network;
- b) they were given utility incentives (many pre-existing);
- c) they have to benefit from utility investment (whose relation to a) and b) is not defined);
- d) such ownership requires utilities to make direct financial contributions to self-directed investments to be eligible as ETPs;
- e) requires utilities to invest such they own/operate the EV charging systems themselves in order to be additional.

With voluntary market carbon capital now available from EV charging, CETA should reconcile how best to address it through the compliance market it establishes. Several possible options might accomplish this:

- Use a voluntary set-aside reserve mechanism - such as those used in cap-and-trade systems - to allow voluntary carbon credits to not double-count with compliance ETPs.
- Require regulated entities to pay incremental funds to EV charging projects issuing certified carbon credits, so that they are compensated for the prevailing market price that the rest of their portfolio is sold for in voluntary markets (in addition to other incentive payments in the region).
- Limit EV charger Energy Transformation Projects to those that the regulated entity directly invests in, and/or owns entirely.
- Clarify terms around "self-directed investments" as defined in Section 18(b)(v) and what new additional funding means for non-utility owned EV chargers.
- Create a threshold for Energy Transformation Projects similar to that used for energy efficiency - through Section 18(b)(i) - such that only EV chargers over a certain level would be eligible.
- Clarify that the application of EV chargers as ETPs would not render any future low carbon fuel standard assets that Washington State is considering stranded.

Through your consideration of creative options such as these, the Washington State may compliment and advance market activity for electric vehicle charging, rather than inadvertently impede investment.

### **Response to O-5-1**

All of the points raised are excellent examples of the kind of detail that Ecology needs to work out in the creation of a comprehensive protocol in accordance with WAC 173-444-070. The process outlined in the rule for the creation of that protocol is the appropriate venue for bringing forward these concerns and, ideally, proposing solutions. It is worth noting that the primary concern brought forward is the potential for an electric vehicle charging project to not be additional, i.e., to be eligible to receive credit even though it was happening anyway (and in the specific case noted, because of funding received through the carbon market). This rule and the CETA statute clearly prohibit ETPs that are not additional from being eligible for compliance recognition.

## **Emissions from electricity storage facilities**

### **Commenter: Vlad Gutman-Britten, Climate Solutions - Comment O-3-1**

Consideration of storage in emissions calculations: Climate Solutions strongly recommends that Ecology incorporate methodologies for calculating electricity emissions procured from storage resources. Calculating from the power plant busbar will address stored electricity by requiring that the full amount of generated power needs to be considered, regardless of how much of that power is ultimately delivered to customers after incorporating round-trip efficiency, transmission, etc. However, just as the Department provides a provision for calculating transmission losses should this not be included in the underlying calculation, it is critical that similar loss calculations be included to address storage inefficiencies as well.

Further, stored power will not always be traceable to its generating resource. In the event that power purchased from a storage facility is sold to the utility as unspecified electricity, the approach within the draft rules will fail to account for the full life of the electricity. We recommend that Ecology develop a separate procedure for unspecified electricity from storage facilities to incorporate these losses, with consideration for the particular efficiency characteristics of the battery, pumped hydro installation, or other storage resource in question. Because this would be consistent with the requirement to calculate climate solutions accelerating the transition to our clean energy future transmission losses. Climate Solutions urges the department to include parallel language requiring the full calculation of these utility claims and emissions, ensuring that a utility claims the full generation amount, rather than just the electricity received from a storage provider.

### **Response to O-3-1**

This rule provides methods for calculating GHG emissions from electricity generation. In consultation with the regulating agencies, we have developed a method for including

transmission losses. The calculation of transmission losses includes all electric energy losses measured between the busbar of the power plants (the conduit that connects the power plant with the electricity transmission system) and what is measured at the retail electric customer of the utility. Storage inefficiencies would be accounted for when a utility purchases more power to account for losses due to inefficiency. Additionally, the regulating agencies have not requested a method for calculating emissions due to storage inefficiencies from storage resources. If a utility's regulating agency determines that a calculation method is not appropriate, they have the authority to instruct a utility to use a specific calculation method on a case-by-case basis. A utility should consult with their regulating agency if this situation applies.

## **Extending deadline for GHG emissions reporting**

**List of commenters:** Puget Sound Energy, Avista Utilities

### **Commenter: Kevin Booth, Avista Utilities - Comment B-3-1**

*Timing of GHG content calculations using the EPA methodology.*

Emissions reporting as proposed in WAC 173-444-040(2)(b), states that if EPA 'has not yet published emissions values for the calendar year in the calculation: use the most recent five year rolling average published emissions values." This is in lieu of the actual reported emissions for a specific year. Not all generating facilities currently reporting GHG emissions to the EPA have a five-year record of doing so. Please revise this section of the rule to cover this specific situation: or preferably: extend the Ecology reporting deadline to Q4 of each year so that utilities can use actual emission data that has been properly validated and released by the EPA.

### **Commenter: Brett Rendina, Puget Sound Energy - Comment B-2-3**

*The timing of EPA's publication of emissions values may create reporting issues.*

PSE's comment relates to the proposed requirement that, if the EPA 'has not yet published emissions values for the calendar year in the calculation, [utilities must] use the most recent five year rolling average published emissions values." See proposed WAC 173-444-040(2)(b). Because the EPA generally publishes its emissions values after utilities must prepare their emission reports, PSE remains concerned that this approach will regularly result in utilities relying on the rolling average approach to emissions reporting, rather than actual emissions data.

Previously, PSE proposed that rather than relying on a five-year rolling average, utilities should prepare and submit their GHG emissions reports to the Washington Utilities and Transportation Commission (UTC) and the Department of Commerce after EPA data becomes available. Although PSE understands that Ecology has proposed using a five-year rolling average due to a mismatch in timing between the UTC and Commerce deadlines in Q2 and the annual release of EPA's data in late Q3, PSE nonetheless recommends that Ecology extend its reporting deadline to Q4 so that utilities can use actual emission data that has been properly validated and released by the EPA.

These data reports will inform GHG emission reduction progress, and a consistent method should be used to track emissions reductions over time. Switching between averages and actual data unnecessarily introduces uncertainty for known resources. Moreover: the use of five-year averages may include anomalies due to weather, fuel supply, extended outages, etc., which may skew the data. As a final point, PSE maintains that the rule is currently unclear as to whether Ecology intends for utilities to update the five-year rolling average with actual EPA data after it is released. If so, this would add another level of cumbersome data reporting.

### **Response to B-2-3 and B-3-1**

In this rule, Ecology provides methods for determining GHG emissions content in electricity. This rulemaking does not introduce any new reporting requirements to Ecology. As such, Ecology does not have authority to modify reporting timelines of a utility's regulating agency as Commerce and UTC rules specify the reporting deadlines. Ecology is aware of the potential timing issue with the release of data by EPA and the utility reporting to the applicable regulating agency. In consultation with the regulating agencies, Ecology responded by providing an alternative if EPA data are not yet published. If EPA has not yet published data for a calendar year, a utility should use the most recent five-year rolling average of published emission values. A utility's regulating agency has the authority to instruct a utility to use a specific calculation method on a case-by-case basis if the regulatory agency determines a method is not appropriate. For example, if EPA has not yet published data for a calendar year and a utility cannot calculate a five-year rolling average of published emission values, the utility should consult with their regulating agency.

## **Including upstream emissions**

**List of Commenters:** Climate Solutions, NW Energy Coalition

### **Commenter: Vlad Gutman-Britten, Climate Solutions - Comment O-3-2**

Include coverage of upstream emissions: We urge the Department to incorporate calculation methodologies for upstream emissions. The Clean Energy Transformation Act in RCW 80.28.405 requires that the "cost of greenhouse gas emissions resulting from the generation of electricity" be incorporated into utility plans. While this provision does not apply to the Department of Ecology, provides an indication of the necessary coverage for the purpose of GHG calculation requirements. Because upstream emissions, including leakage of natural gas, are a result of a utility's consumption of that fuel for the generation of electricity, they should be included as an additional calculation within this rule. This is necessary for consumers to accurately understand the full emissions impact of the electricity product provided to them by their utility.

A number of utilities already incorporate upstream emissions calculations within their Integrated Resource Plan, but it's not clear that they do so consistently or following best practices and best available science. Climate Solutions encourages the Department to incorporate calculation

methodologies for upstream emissions and ensuring that these are consistent with forthcoming rulemaking in the Greenhouse Gas Assessment for Projects.

**Commenter: Joni Bosh, NW Energy Coalition - Comment O-4-1**

Generally, the rules seems consistent with the statute, but we continue to have concerns with the complexity of the calculations section.

As we have commented before, the rules still do not account for the totality of emission impacts from the use of fossil fuels, which is contrary to the intent of the Clean Energy Transformation Act (CETA). As we transition Washington's electricity, system to 100% clean energy, as stated at RCW 19.405.010(2), we need to account for all the emissions, not just the emissions created when fuel is combusted.

To achieve an emissions-free, renewable electrical system, *all* GHG emissions resulting from providing electric service must be accounted for. GHG content calculations should incorporate all combustion and *non-combustion emissions*, including upstream emissions in the fuel supply chain, emissions from the generation of fossil fueled electricity, including station service, spinning reserves, and the effect of transmission and distribution losses.

This more comprehensive approach to ghg emissions calculations is described by Commerce in the 2nd draft rules at which applies the Social cost of Greenhouse Gas emissions "to all emission resulting from the generation of electricity using fossil fuels including extraction, production, transmission and combustion." This acknowledges that all phases of the use of fossil fuels creates emissions, which should be the standard in Ecology's approach as well.

For example, accounting for all emissions could make the cogeneration adjustment used in Equation 2 unnecessary, as well as change section (5) regarding the proposed calculation of transmission losses. Currently, section (5) addresses only one component of non-combustion emissions, transmission and it is not clear if that term includes distribution losses. The equation needs to account for other non-combustion emissions. Additionally, the 5% factor at (5)(b)(iii)(A) would need to be adjusted to reflect that change. While we suggest some language in the redline below to reflect our concerns, (5) should be redrafted from (b) on to make clear that all emissions need to included in the calculations.

(5) ~~Transmission~~ GHG losses. Calculate ~~transmission~~ GHG losses using the following method as directed by the regulatory agency.

(b) Use one of the following to calculate ~~transmission~~ GHG losses:

(i) If utility claims are reported on a sales basis, then multiply total sales in MWh by  $\frac{1 - (\text{retail sales MWh} / \text{total claims MWh})}{1}$ .

(ii) Transmission losses in this equation are zero MWh if:

(A) ~~Utility claims are reported on a plant net output basis; or~~

(B) The emissions rate already includes all greenhouse gas emissions ~~transmission losses~~; or

(C) The emissions rate is from an asset-controlling supplier and includes all non-combustion emissions, where that emissions rate was approved by the regulatory agency.

(iii) If unable to calculate transmission losses using subsection (5)(b)(i) or (ii) of this section, then multiply utility claims in MWh by:

(A) 5%;

(B) A value specified by the regulatory agency that includes combustion and non-combustion emissions.

### **Response to O-3-2 and O-4-1**

RCW 19.405.070 requires that the GHG content calculation be based on the fuel sources that the utility reports and discloses in compliance with Chapter 19.29A RCW. Ecology also consulted with the Commerce and the UTC in deciding not to include upstream emissions in the GHG content calculations.

Including upstream emissions would be a substantive change and is not consistent with standard GHG reporting performed under the standard GHG reporting performed under other state programs. Additionally, if included, lifecycle emissions would need to be included for all sources and no technology is 100% non-emitting on a lifecycle basis. In addition, sources report upstream natural gas leakage to the UTC through a separate law. Therefore, Ecology did not include upstream emissions in the GHG content calculations.

## **Indirect emissions**

### **Commenter: Matthew Hamilton, NAVFAC Northwest - Comment OTH-1-1**

Concern about the accounting of direct and indirect emissions. The output from one entity becomes an input to another entity, and this will lead to double counting of emissions. The indirect emission accounting may lead to litigation as in Chapter 173-442 WAC.

### **Response to Indirect emissions**

The GHG emission calculation in this rulemaking addresses direct emissions during electricity generation. It does not address the emissions at different life cycle stages of electricity generation. However, thinking the concern might be related to another rulemaking, we shared the information with the rulemaking lead working on the Greenhouse Gas Assessment for Projects (Chapter 173-445 WAC).

## **Initial list of eligible project categories**

**List of commenters:** Snohomish PUD, Climate Solutions, NW Energy Coalition, Dave Warren (for Renewable Hydrogen Alliance, Klickitat PUD, and Douglas PUD)

### **Commenter: Dave Warren for Klickitat PUD, Douglas PUD, and Renewable Hydrogen Alliance - Comment B-4-1**

#### *Initial Project Categories*

We note and appreciate and support the inclusion of "at least one category pertaining to either the use or supply of renewable hydrogen" in the initial list of project categories in draft WAC 173-444-060(7)(d).

We request language adding an additional project category in the initial list reading "at least one category pertaining to equipment for renewable natural gas processing, conditioning, and or equipment or infrastructure used solely for the purpose of delivering renewable natural gas for consumption or distribution" [RCW 19.405.020(18)(b)(iv)]

Renewable natural gas has a track record and sufficient data in the state to easily determine greenhouse gas emissions reduction from the use of RNG to displace fossil fuels. RNG meets low carbon fuel standards in both the federal renewable fuels program and the California low fuels program. With one of the region 's largest producer of renewable natural gas operating in Klickitat County by Klickitat PUD, encouraging investment in expanding that operation, or using the PUD expertise in adding RNG capture and production at other emitters of biogas such as landfills, dairy digesters and sewage treatment plants would the test of "significant and swift" reductions in greenhouse gas emissions.

### **Commenter: Vlad Gutman-Britten, Climate Solutions - Comment O-3-3**

#### *Additionality of electricity system resources.*

CETA directs the Department to consider a range of project categories under RCW 19.280.020(18)(b), but it doesn't require their inclusion: ETPs "may include" (emphasis added) a range of identified project categories like

- (i) "Home weatherization or other energy efficiency measures,"
- (iii) "Distributed energy resources and grid modernization", and
- (v) Projects at industrial facilities to aid in "conservation, new renewable resources, demand response".

This list is permissive, but the additionality provisions incorporated within RCW 19.405.040(1)(b)(iii) and RCW 19.405.040(2) are not. Each one of these projects would contribute to a utility's compliance with CETA itself, and so should not be eligible for consideration as an ETP.



Energy efficiency, demand response and distributed clean energy resources are all strategies for managing loads and would facilitate compliance with the CETA's clean resource requirements. Grid modernization, since it is defined as a strategy for incorporating non-additional DERs, also does not meet the statute's additionality requirements. Even if the ETPs for these categories were to exceed what would otherwise be cost-effective under the requirements of RCW 19.405.040(1) and RCW 19.405.050(1), their deployment would still materially change a utility's compliance pathway under the core clean energy provisions of the law. It would also alter utility's needs for other resources, and ultimately would not yield climate solutions accelerating the transition to our clean energy future with new carbon reductions compared to the baseline established under the 2030 or 2045 requirements. They certainly would not meet any known standard for greenhouse gas neutrality. For this reason, Ecology should not allow these types of project types as ETP categories.

This interpretation is consistent with all descriptions of ETPs in the statute, including under RCW 19.405.040(1)(b)(iii). While this provision allows for "investing in energy transformation projects, including additional conservation and efficiency resources beyond what is otherwise required under this section", this provision still directs Ecology to do some subject to an evaluation of the additionality of these and other projects. These "conservation and efficiency resources" can be used as alternative compliance only if said resources "are not credited as resources used to meet the standard under (a) of this subsection [the GHG neutral standard]". Because there is no way to separate the application of these project categories from a utility's requirements to procure clean power, these project categories should not be included in Ecology's future listings, this provision is consistent with other requirements in CETA that disallow the inclusion of these categories as ETPs.

**Commenter: Vlad Gutman-Britten, Climate Solutions - Comment O-3-4**

*ETP category consideration.*

Climate Solutions is supportive of including ETP categories pertaining to transportation carbon reduction. Provision of electric vehicle charging clearly meets the statutory direction established in CETA, and we believe that hydrogen supply for transportation can as well. We refer the Department to our letter dated May 22<sup>nd</sup> of this year for considerations regarding the inclusion of hydrogen ETPs. While we think this is a reasonable category for consideration, we have substantial concerns, as previously discussed, this ETP category may provide credit for hydrogen use outside of the transportation sector, outside of Washington, or in a way that double-counts emission reduction. While we will reserve further comment until Ecology describes the hydrogen transportation ETP, we urge the Department to be attentive to these considerations and ensure that any selected category is additional in, and of itself, and in combination with other eligible categories.

In addition to the identified categories, Climate Solutions recommends that Ecology explore building electrification as an eligible ETP category. Buildings are some of the fastest growing sources of emissions in the state, and the use of heating oil, wood stoves, and natural gas has been shown to cause a myriad of significant indoor and outdoor air quality harms. Addressing

these harms meets CETA's broader direction to serve the public interest and equity. There are currently very few utility programs that incentivize building electrification, making these projects additional and accelerating overall greenhouse gas reductions in the state. Utilities can receive ETP credit for incentivizing heat pumps, radiant heating, electric water heaters, and other electric appliances when these replace a different emitting appliance.

Additional categories for consideration could include agricultural and industrial emissions, both identified and still eligible categories listed within CETA's ETP definition.

**Commenter: Joni Bosh, Northwest Energy Coalition - Comment O-4-5**

*Eligible categories of energy transformation projects.*

We appreciate edits and restructuring of this section that have, overall, improved the section, more closely aligned the rule with statute and made process and expectations clearer. We suggest an edit to (7)(d) to also include energy efficiency projects in excess of any other state obligations as described at RCW 19.405.020(18)(b)(i).

**Commenter: Clark McIsaac, Snohomish PUD- Comment B-5-2**

*WAC 173-444-070 and 173-44-080: The process to establish an ETP is overly complicated and may consequentially reduce ETP development.*

The current draft rule language proposes a process for determining the viability or eligibility of an ETP that is substantially burdensome and may prove to be prohibitive to ETP implementation. If Snohomish were to consider a potential ETP, there is currently no clear path laid out in draft rule language for how to evaluate its eligibility. The current draft rules seem to raise an immediate barrier that must be navigated before utilities can determine core issues, such as the essential functions or viability of an ETP. This proposed process significantly reduces the viability of ETPs as a reasonable compliance pathway by shifting initial ETP considerations away from compliance with CETA at the lowest reasonable cost.

There are number of identified criteria found in WAC 173-444-070 that are reasonable and useful measures for evaluating an ETP: such as reduction of greenhouse gases: temporal and geographic effects, and establishing appropriate GHG conversion factors. However, as drafted: these factors are included with a number of prescriptive requirements that may consequentially stifle ETP development.

Snohomish suggests creating standardized eligible project types with uniform compliance credits by project type to reduce soft costs and encourage utility investment. For example, 2 electric vehicle chargers could have an established standardized compliance value per charger installation based on the average asset life of that charger. This is similar to how many conservation investments have deemed first-year value for energy savings. It is important to balance the desire for precision in estimating with the methodology's practicality and the project cost impacts of the choices made. Utilities would still have the option to develop ETPs that do not fall into one of the standardized categories. However, more public benefit may be created by

a generally acceptable project type and compliance value that incentivizes more investment than a precise framework that incentivizes less.

Snohomish encourages simpler and more foundational draft rules regarding ETP development, analysis, and review. With the wide variety of ETPs that could be considered, overly complex or prescriptive rules such as those found in the current draft could significantly reduce or eliminate innovative paths to CETA compliance and carbon reduction.

### **Response to B-4-1, B-5-2, O-3-3, O-3-4, and O-4-5**

The rule establishes a process through which Ecology creates an initial list of eligible categories of ETPs after this rule goes into effect (beginning 30 days after that time). Numerous commenters have offered comments supporting or opposing the inclusion of various categories of potentially eligible ETPs during the formal comment period, and in the informal rulemaking process. Ecology notes that WAC 173-444-060(7)(c) specifically requires Ecology to take into consideration those comments in the creation of the initial list of potentially eligible ETP categories. As such, Ecology acknowledges that stakeholders brought up the following types of projects in comments; with narrative discussion as to the merit of including (or not including) these project categories:

- Support for building electrification.
- Support for renewable natural gas.
- Opposition to including electric efficiency.
- Qualified support for hydrogen fuel.
- Support for electric vehicle charging.
- Request to include all project types listed in the CETA statute.

Ecology will consider all of the arguments for or against these types of projects to determine the initial list of potentially eligible ETP categories according to the process established by this rule. At the same time, because Ecology has not yet established the appropriate venue for a response to these specific comments, but will through the processes developed in this rule, further response at this time is not appropriate.

## **Revision of Global Warming Potential values**

### **Commenter: Joni Bosh, NW Energy Coalition - Comment O-4-3**

We commented in January that, rather than simply continuing with the outdated 2007 IPCC AR4 report's Global Warming Potential value for emission rates, it would make sense for Ecology to update WAC 173-441-040 by adopting at least the newer Fifth Assessment Report emission values for CO<sub>2</sub>e from the Intergovernmental Panel on Climate Change's (IPCC's) Fifth Assessment Report, published in 2014. Since the IPCC's Sixth Assessment is due in April of

2021, we suggest Ecology consider adopting the most recent standard when it acts; the lag time on adoption of the emission values is troubling.

### **Response to O-4-3**

For consistency with existing state statute, other Washington regulations such as the GHG Reporting Program (WAC 173-441) and the state inventory, as well as most other state, interstate, federal and international regulatory programs, Ecology is using the 100 year global warming potential values (GWPs) from the IPCC 4th Assessment Report, as established in Table A-1 in WAC 173-441-040. Consistency across regulations and time is beneficial for several reasons, including efficient tracking of GHG reductions over time and expediting future emission updates to new GWPs. Additionally, the difference between reported emissions using AR4 or the updated GWPs from the IPCC 5th Assessment Report is minimal in this case, as virtually all of the covered emissions are carbon dioxide with a GWP of one. Ecology incorporated the GWPs into this regulation by referencing the GWPs in WAC 173-441-040. This means that whenever Ecology updates GWPs statewide, those updates will be incorporated into mitigation requirements as quickly as possible.

## **Pre-2030 implementation of ETPs**

### **Commenter: Vlad Gutman-Britten, Climate Solutions - Comment O-3-6**

**Authority for early action:** The Department's draft rules do not speak to when projects must take place in order to receive ETP credit for use by utilities after 2030. Because of the urgency of climate change, we request the Department specify that utilities may begin earning ETPs in 2022, the first year of required Clean Energy Implementation Plans, or when rules, categories and protocols are complete, whichever is later.

### **Response to O-3-6**

CETA gives Ecology no authority to make a final determination as to whether or not to count any proposed ETP toward the compliance obligation of an electric utility. CETA reserves that authority solely for the "approving body," as defined in WAC 173-444-020. As such, it follows that Ecology has no authority to determine by what date that final approval can or should occur.

CETA grants Ecology clear authority to establish the foundational infrastructure by which electric utilities demonstrate the validity of their ETP proposals relative to the statutory requirements of CETA, and the benefits of those ETP projects over time. As a result, there is a clear necessity for those that wish to implement ETPs to wait until that foundational infrastructure is completed (or sufficiently completed for the ETP category in question) in accordance with the processes established in this rule. However, once that foundational infrastructure is sufficiently in place to allow a given ETP proposal to be developed and evaluated properly, and assuming that an approving body is also

sufficiently prepared to receive those proposals, then there is no basis in CETA for Ecology denying that process from moving forward to the appropriate approving body. To emphasize, the ultimate decision for approving or denying an ETP rests with the approving body, not with Ecology. Likewise, the ultimate decision on the timeline for approving or denying those ETPs rests with the approving bodies, and not Ecology.

## **Public participation during project validation**

### **Commenter: Joni Bosh, NW Energy Coalition - Comment O-4-6**

*WAC 173-444-080 - Procedures for energy transformation projects.*

It is not clear why the 30-day comment period for provisionally "validated" projects was dropped since the last draft. Instead of eliminating the opportunity for the public to comment on proposed energy transformation projects when Ecology provides an advisory validation opinion for a project, it would be better to require public comment for any proposed project, including those validated by third parties.

We strongly urge that the processes and procedures that will be established in the Ecology guidance document for third party verification at (9)(c) include a public review opportunity and that the 30-day public comment that was previously required at (10)(g) be reinstated. We have so indicated in our redlined rules.

### **Response to O-4-6**

The final approach as established in this rule extend the initial comment period on proposed projects from 30 to 45 days to allow extra time, but in one time window, for all parties to raise concerns and provide the input that they feel is necessary for Ecology to make an appropriate validation appraisal of the project plan. This represents a compromise between the requests to drop entirely the second public comment window by some commenters with the loss of overall time for comment on any given proposed project.

## **Support for the proposed rule**

### **Commenter: Angela Stenhouse - Comment I-1-1**

I think this is a worthy goal, and I would support it as long as hydropower is not excluded as a source of "clean energy" and it will not cause rates to increase over 15%.

### **Response to I-1-1**

Thank you for supporting the goal of CETA and this rulemaking. CETA recognizes hydropower as an important clean energy resource to meet the established electricity standards in 2030 and 2045. CETA also limits the average annual incremental cost of meeting these electricity standards or the interim targets. However, the mandate to

implement the annual average incremental cost limits is not with Ecology. The governing bodies of COUs, and the UTC have the authority for reviewing the incremental costs as part of the Clean Energy Implementation Plans of electric utilities.

## **Unspecified electricity emission factor update**

**List of commenters:** Cowlitz Public Utility District No. 1, WPUDA, Puget Sound Energy

### **Commenter: Steve Taylor, Cowlitz PUD - Comment B-1-2**

The PUD continues to encourage Ecology to schedule the work necessary' in the near term to update the default emissions rate for unspecified electricity which is currently established in statute at 0.437 mt/CO<sub>2</sub>e per MWh. Utilities should be able to plan for their future resource acquisitions based upon the most current data available regarding the unspecified fuel mix. The early retirement of coal-fired resources and ever-increasing addition of renewable generation to the Western Interconnection points toward a significantly cleaner average emissions rate for unspecified electricity than the current default rate. We believe an updated rate would more accurately reflect the progress made in GHG emissions reduction across the grid and help utilities maintain affordability for its customers while taking action to comply with CETA's clean energy standards.

The PUD recommends a provision in the final rule to deliver an updated default emissions rate by January 1, 2022 with subsequent updates recurring no later than every four years.

### **Commenter: Brett Rendina, Puget Sound Energy - Comment B-2-1**

Ecology should revise the proposed rules to include a clear and regular process to update the emissions rate for unspecified electricity.

PSE reiterates its earlier requests for Ecology to specify an explicit process: in the text of the rule: for the periodic review and update of the emissions rate for unspecified sources. As stated previously: PSE's primary goal is to ensure that any emissions rate applied to unspecified sources is accurate and remains that way over time. In the proposed rules, however, Ecology has proposed to adopt the backstop emissions rate specified in the CETA statute. See RCW 19.405 070(2); proposed WAC 173-444-040(4). PSE understands that this emissions rate may reflect the marginal rate for the WECC as it stands today. PSE anticipates that as the region's energy generation mix gets cleaner due to coal generation retirements and more renewable resources coming online-this rate will become increasingly inaccurate over time.

PSE appreciates that Ecology has committed, albeit informally, to updating the initial emissions rate at a later date, perhaps in a subsequent rulemaking. Yet PSE continues to believe it is critical that Ecology specifies a timetable - and a regular cadence - the rules themselves for updating this emissions factor. When CETA was enacted, PSE believed Ecology would endeavor to develop an independent emissions rate in this rulemaking, not simply rely on the backstop rate included in the statute for use in the event Ecology was unable to adopt an emissions rate within the one-year statutory period. However, Ecology has interpreted the language in CETA differently PSE

can accept this approach, provided that Ecology commits to a regular cadence for updating the emissions rate.

Consistent with PSE's earlier comments and testimony at the October 6, 2020 hearing, Ecology should revise the rules to:

- 1) Update the emissions rate for unspecified electricity by 2022; and
- 2) Synchronize subsequent updates of the emissions factor with the four-year cycle for utilities to prepare clean energy implementation plans (CEIP) under CETA.

In PSE's view: this approach will ensure that emissions reported as part of each subsequent CEIP are as accurate as possible.

**Commenter: Nicolas Garcia, WPUDA - Comment O-1-2**

WPUDA asks Ecology to commit to reviewing and finalizing the carbon content of unspecified electricity utilities must use in their resource planning and reporting at least a year prior to each due date for Clean Energy Implementation plans. The carbon content of electricity in Washington has been trending down and WPUDA expects that to continue. It is in the public interest to have current and accurate emissions estimates, something that will not happen if the proposed level of 0.437 metric tons CO<sub>2</sub>e/MWh is not regularly updated.

**Response to B-1-2, B-2-1, and O-1-2,**

Ecology is not modifying the unspecified electricity emission factor as part of this rulemaking. The legislature recently established it in RCW 19.405.070. As required in CETA (RCW 19.405.070) the emission factor is consistent with the factor used by other markets in the western interconnection. Ecology is committed to updating this factor if it is determined to be appropriate through a future rulemaking process. As rulemaking priorities are set at the agency level and impacted by multiple factors, Ecology is unable to commit to a timeline in this rulemaking for future updates. Ecology notes that any person can petition Ecology to request rule adoption per RCW 34.05.330.