

Summary of Written Feedback from October TWG proposal

Based on Questionnaire prompts and other comments submitted

November 2013

Outline

This document contains a 1-pg section summarizing the major **GHGP decisions** based on TWG feedback on the October proposal, and specific areas for further **TWG feedback**. Following this is a 14-g **Detailed Summary** broken down by topic on the Questionnaire/Proposal from October. GHG Protocol responses to these points are provided.

Your feedback on the follow-up questions is requested by Friday, December 6th. The context for these questions can be found by topic in the Detailed Summary.

Major decisions
<p>Overall reporting approach</p> <ul style="list-style-type: none"> ✓ Eliminated jurisdictionally-approved method provision (can report separately)
<p>"Instrument feature" disclosure</p> <ul style="list-style-type: none"> ✓ Will rename category (see TWG feedback box below) ✓ Will add Ecolabel or other certification as feature to disclose
<p>Outline and Appendices</p> <ul style="list-style-type: none"> ✓ Will make Data Quality evaluation separate appendix ✓ Will <u>not</u> provide separate appendix on program design features, but will emphasize key differences in design and its context through Product Feature Disclosure section ✓ Will <u>not</u> provide separate appendix on calculating supplier-specific emission factors, but will provide high-level description of factors' boundaries in chapter on Market Method ✓ May provide Residual Mix best practices in Appendix (see TWG feedback box below)

TWG follow up questions	TWG responses
<p>Overall reporting approach</p> <ul style="list-style-type: none"> ✓ What are best practices for entities purchasing certificates on behalf of others (or energy use) within its supply chain? 	
<p>Data Hierarchy</p> <ul style="list-style-type: none"> ✓ Is supplier-specific information a relevant data source in regulated markets? ✓ Is there current practice of customer-calculated GHG emission rates based on fuel mix disclosure is appropriate (risk of double counting)? Should the Guidance explicitly address this? ✓ Should this Guidance give specific, extensive list of emission factors under each category, or only a few categorical examples? 	
<p>Quality Criteria</p> <ul style="list-style-type: none"> ✓ How specifically to define "same market" boundary? ✓ How specifically to define vintage requirement? ✓ Require conveying direct emission rate? (GOs do not state that they convey this claim) ✓ How should the residual mix criterion be phrased to both emphasize its importance but not overly burden corporate reporters? 	
<p>"Instrument feature" disclosure</p> <ul style="list-style-type: none"> ✓ Would name change to "Product Generation Features and Market Context" be more appropriate? ✓ What format to use for instrument/generation feature disclosure? ✓ Should require disclosure on regulatory surplus for certificates/contracts? 	
<p>Outline and Appendices</p> <ul style="list-style-type: none"> ✓ How much background on tracking systems needed? Where is this best located in document? 	

Detailed Feedback Summary by Topic

Reporting approach (requiring both figures)	
Comment	GHGP Response
<p>1. Better articulation of requirements:</p> <ul style="list-style-type: none"> a. Need to emphasize that both figures are <i>required</i> b. In Japan, shouldn't be required to use specific schemes. 	Will clarify requirements
<p>2. Better articulation of approach justification and risks of each:</p> <ul style="list-style-type: none"> a. Include more here on why the two numbers are important and how they can be used for decision-making. Otherwise, companies won't take the opportunity to really think about what each number tells them. b. Need to emphasize the issues/concerns with contractual information, both to represent TWG process and specifically on the issues of back-up generation – safeguard credibility of WRI when these issues become more understood. c. Need stronger, clearer reason for location-based data – how is it a better "baseline"? Isn't absolute energy consumption a better comparison? d. Not necessarily true that "market-inclusive figure more closely reflects the actions a company has taken." 	Will clarify language and provide greater context on value of both methods
<p>3. Define "location boundary": Global companies need a better definition of "location" for the location-based method.</p>	Will address in location-based method description
<p>4. Terminology: Clarify market-inclusive vs. market-based</p>	See Terminology box (p.15)
<p>5. Double counting: Intentional, considerable double counting is supported by this approach</p>	Will provide more detail on why "double counting" inherent between methods and acceptable
<p>6. No supplemental reporting option: Should not keep supplemental as an option: if both figures are valid, they should be presented side by side.</p>	Keeping option at this time due to TWG feedback
<p>7. Graphic equation for market-inclusive figure Should re-state as (Portion of activity data associated with contract x contract-specific emission factor) + (balance of activity data x residual mix emission factor)</p>	Will correct graphic
<p>8. Goal-setting implications:</p> <ul style="list-style-type: none"> a. Clarify that companies should disclose method used for tracking <i>if</i> they set a goal b. A location-based reduction goal for scope 2 equates to an energy-intensity target or on-site generation (or using offsets) c. If a company sets a goal using the location-based total, would they have to use side-by-side reporting? (unless none of their facilities were in a market system) 	Will spell out goal-setting implications to address questions

Box 1 – "Defining a market-based claims system"	
Comment	GHGP Response
<p>1. Context: Need to set a context to this first: perhaps an opening summary paragraph (above the box) could be written as follows: <i>"Companies with facilities in regions that support market-based claims, and where those claims meet Quality Criteria, must report two figures: a market-based scope 2 figure reflecting data derived from contractual instruments, and a location-based figure reflecting data on current production in the facility's grid. Companies can choose whether these figures are reported side-by-side in scope 2, or whether the location-based figure is disclosed separately. Companies with no facilities in market-based regions will only report a single scope 2 figure using the location-based method."</i></p>	Summary using this phrasing will be in Guidance

<p><i>Companies should also report their electricity consumption and key features about their procurement.</i></p>	
<p>2. Need clear definition of “market based system”: Need black-and-white definition of what constitutes a market-based system – remove “in general” statement. Should also be appendix or companion resource defining market-based or non-market based systems by geography.</p>	<p>Will clarify the purpose of this box (background) vs. triggers for specific reporting requirements</p>
<p>3. Clarify relationship of Box 1 to Quality Criteria: What is this Box description’s relationship to Quality Criteria? Clarify here that instruments need to meet quality criteria, too</p>	<p>Will ask to TWG whether supplier-specific information is necessary in regulated markets</p>
<p>4. Emphasize importance of choices in market: Designation of whether to use this approach should not be based on the <i>markets</i> where facilities are located, but on what procurement choices they’ve made (i.e., a more narrow “trigger” for market-based reporting on supplier info). Just because a supplier discloses does not mean a company should research and report that figure, if they have not made and cannot make a procurement choice.</p>	<p>Will reflect phrasing changes in Guidance</p>
<p>5. Terminology and phrasing:</p> <ul style="list-style-type: none"> • Market-based Claims Systems” is less than ideal terminology. “System” in particular is confusing. Since you use “contractual claims market” as shorthand further on, we suggest simply using this term throughout • Book and claim” is actually narrower, requires formal tracking and certificates. But supplier disclosure can happen using allocation methodologies without certificates (and it’s still a ‘market-based approach”. • RE-order this list (electricity suppliers disclose GHG intensity of the power they deliver; consumers have choice of electricity product or supplier; or electricity tracked through certificates) • Disclosure of “GHG emission rate information about energy production to consumers” is not always the primary purpose of these systems (e.g. in the US), but they can be used for this propose if the meet Quality Criteria. • Rephrase to “These are markets where markets where electricity can be purchased and consumed as a differentiated product, due to contractual instruments and arrangements” • Change to: <i>Electricity attributes are tracked through certificates that are conveyed through contracts or specific software systems to enable voluntary consumer claims about their purchased electricity (e.g. RECs in North America or GOs in parts of the EU);</i> 	<p>Will reflect phrasing changes in Guidance</p>
<p>6. Simplify definition of “marked based claims”: Re-phrase box to read “What Is Meant by Market-Based Claims? For the purpose of GHG scope 2 emissions reporting, a market-based claim is one where a reporting company calculates emissions based on its decision(s) to purchase electricity, steam, heat or cooling products whose emissions are different from grid-average emissions (the location-based method). In general these types of differentiated claims are enabled in markets where:</p> <ul style="list-style-type: none"> • Consumers have choice of electricity product or supplier; or • The right to claim emission attributes is tracked through certificate ownership; or • Electricity suppliers disclose the GHG-intensity of their supply separate from the larger grid emissions. 	<p>Will incorporate this phrasing into Guidance</p>

Comment	GHGP Response
<p>1. Direct line as data type? Where is a “direct line” of physical supply connection covered?</p>	<p>Will clarify this type of information in both location-based and contractual methods</p>
<p>2. Organization of Table: Break down based on purchasing options- where do I fall vs. what market am I in?</p>	<p>Will clarify definition of market type vs. option analysis</p>
<p>3. Order of hierarchical preference:</p> <ul style="list-style-type: none"> • Is this really a hierarchy, so certificates are “preferred” purchasing option? Or do you have to use what’s listed in order (vs. freely choosing between all the data types for a given method)? How do the data quality criteria influence this listing? • Unbundled instruments, and contracts that include the bundled attributes should be treated as equivalent and grouped in the same category and are equivalent, though some have suggested breaking these into two categories. 	<p>Will clarify that data hierarchy functions as categorical list ranked on precision of information, not full assessment of data quality nor recommendation on preferred procurement mechanism.</p> <p>Greater instrument differentiation can come through the Feature disclosure</p>
<p>4. Data availability: how stringent is the requirement to obtain correct data for category on the hierarchy? Does availability mean accessibility under any circumstance, or just not easily obtain? Data availability can be also be a subjective test</p>	<p>Will follow GHGP precedent and require use of best available data, without any further prescription</p>
<p>5. Emission factor boundaries: Boundaries of emission factors vs. approaches: what’s included, how do they compare? Could the market-based approach be applied to the whole US and then residual factor would be national residual mix, but then the location-specific uses regional e-GRID factor?</p>	<p>Will clarify and compare boundaries of these different emission factors</p>
<p>6. Emission factor examples: Will the WRI provide a table of emission factors or only provide these kind of “example” lists? Would be more direct and helpful to give Examples for each type, as they relate to existing national data.</p>	<p>Will ask TWG whether specific list vs. categorical examples is better in Guidance</p>
<p>7. PPAs: Clearly state that if a PPA is used, have to buy the GO/s/RECs as part of it –i.e., contracts that do not include a trackable attribute certificate but still convey the GHG emission rate of the production source(s) and that emission rate cannot be assigned to any other party</p>	<p>Will clarify wording</p>
<p>8. Supplier specific mixes:</p> <ul style="list-style-type: none"> • Choice: Should only be necessary to use this data source where choice is possible. That doesn’t change whether you’re in a market-based approach (still have RECs/residual that you’d have to use), but supplier-specific figure not really useful here since can’t choose supplier, and not worth expending time to look into • Background: Include this as background: “When producers sell their production to a power exchange (not bilaterally to a consumer), the power suppliers purchase the volumes they need to fulfill their customer contracts from a power exchange. THUS, a power supplier must be obliged to back up a perceived “production mix” with GO if the reporting entity is to report supplier specific emissions data.” • Calculation procedure: 	<p>See Box 1 note</p>

<ul style="list-style-type: none"> ○ As noted in the Quality Criteria, the supplier-specific factor needs to prevent double counting including certificates. ○ Clarify supplier vs. utility (supplier interfaces with consumes) – utilities may disclose their assets but not the emissions from their purchases (contract or spot market) – what number is being passed on to consumers? ○ Clarify whether this mix/rate must reflect power delivered to the customer, that reflects power that is purchased and re-sold, or include generation only? <ul style="list-style-type: none"> ● Calculating entity: Can consumers calculate the rate themselves based on fuel mix? Or need to have a verified emission rate provided by the supplier? FMD does not always equal the different products & emission rates being provided to customers. 	<p>Will provide more explicit background description and best practices in what supplier-specific emission factors should include</p> <p>Will ask TWG whether customer-calculated GHG emission rates based on fuel mix disclosure is appropriate (risk of double counting)</p>
<p>9. Energy/grid balancing should be reflected in “emissions balancing” We strongly believe that the calculation of EFG should be modified to ensure that all non-flexible and intermittent technologies include balancing emissions. Whilst this makes the derivation of emission rates more complex we believe that accurate relevant reporting requires balancing to be taken into account. For example it should be factored into facility location decisions – a wind based supply contract should have a zero emission rate if it is in a region where balancing is provided by hydro, but a non-zero emission rate in a system balanced by OCGT.</p>	<p>Will provide discussion of the reality of “balancing” energy generation on the grid as part of description of both methods. But will not require market-based method to take into account balancing emissions at this time, as this phenomenon is best reflected in the location-based method, which is already required for all reporters.</p>
<p>10. Role of tracking system: Do we need to define whether the certificate has to be tracked by some kind of tracking system, or criteria for what kind of tracking system is acceptable?</p>	<p>Guidance will not specify requirements about the system, but rather its functions (whatever form it takes), such as ensuring no double counting and retirement of claims. Will ask TWG how much background on tracking systems needed</p>
<p>11. Residual mix should be part of “location-based” data:</p> <ul style="list-style-type: none"> ● First choice for location-based should be an adjusted mix. I would think real-time information – when available - could be based on residual mixes so there could be overlap between #4 and #5 eventually. 	<p>Our two methods for reporting distinguish between purpose of location-based information vs. purpose of market-based. Location-based approach should not show market transactions or adjustments, but instead should show mostly local production figures.</p>
<p>12. Location-based data:</p> <ul style="list-style-type: none"> ● No. 5 “Advanced grid studies on real-time information” sounds good, but the implications have not been discussed. For example, if one company does advanced grid study of the impact of its load shape on dispatch order and therefore emissions, should the locational grid average that everyone else would be using require adjustment? Does double-counting occur? Is this analogous to the desired adjustment to grid average emissions if a company makes contractual electricity purchases, or would it mean that the company is really in a market-based region and should be reporting using a market- 	<p>Guidance will include examples, greater analysis and caveats around possible uses and limitations of advanced grid studies.</p>

<p>based approach? What do these actually look like? Is there a way that real time pricing could be used for this or is it more of a system-wide study? More descriptive examples necessary here.</p> <ul style="list-style-type: none"> • Items No. 6 and 7 seem like they could be more strongly differentiated by distinguishing between electricity use and production. The preferred data would be electricity <u>used</u> because that is what the company should be reporting, whereas electricity <u>production</u> would be less preferred. Electricity use data should reflect exports and imports. • Change to “production information from geographic boundaries that are unrelated to dispatch region, such as state or national borders” • 6 is not clear. Suggest: “Emission factors include all energy production occurring in a defined grid distribution region that approximates to a geographically-precise energy consumption area. Emissions factors should reflect energy imports/exports across the boundary.” 	<p>Will expand on role of grid energy imports/exports</p> <p>Will clarify and simplify wording</p>
---	--

Quality Criteria for contractual instruments	
Comment	GHGP Response
<p>1. Rationale:</p> <ul style="list-style-type: none"> • Add more explanation for why this is particularly risky for consumers (e.g., lack of reliable system poses risks for consumers who may make inaccurate claims or purchase products based on inaccurate claims regarding a products’ actual environmental attributes” • It doesn’t depend on a larger system necessarily. You just need to show that quality criteria are met, i.e. there’s no double counting. 	<p>Will add more description to rationale for this approach</p>
<p>2. Description: Provide this background language: <i>The availability and quality of data varies for both the location-based method and the market-based method (see data quality). However, the allocation of scope 2 emissions through a market-based method should be supported by a reliable tracking system to ensure the integrity of unique emissions claims and to prevent double counting. Whether or not a tracking system is operational, the market instruments used to convey or allocate scope 2 emissions must meet certain conditions. Therefore, this Proposal identifies a set of <u>minimum</u> criteria (called Quality Criteria) that relate to the integrity of the <u>market instruments</u> that convey GHG emissions rate information and claims. These Quality Criteria are listed below. Note that market instruments are intended to encompass all types of contractual claims, not just specific green power claims. Also note that the Quality Criteria for market instruments do not address the <u>product features</u> that may stem from the energy generation itself, including potential policy preferences about technology type, generator vintage, or public subsidies. These product features are discussed separately under Product Feature Disclosure. The difference between Quality Criteria and Product Features is illustrated in Figure 1.</i></p>	<p>Will provide this clarified, improved language</p>
<p>3. Conveying direct emission rate:</p> <ul style="list-style-type: none"> • Conveying the direct GHG emission rate attribute claim – this is important, but it’s not explicit on the GO. Can this be “deduced” for renewables? Not admissible based on other fuels or technologies? • GOs from RE are assumed to carry a 0 emissions rate but they don’t officially...yet. There should be some language here that clarifies how instruments are practically treated. • Non-explicit conveyance/inclusion of the emission rate attribute (for example, 	<p>Will ask TWG for more precise language on how to treat this criterion</p>

<p>where “all environmental attributes” are included) should be sufficient. Also, common practice and historical treatment of the instrument in the market, not just written definitions, should be considered in the demonstration of this criterion.</p>	
<p>4. Suggested re-writes for supplier-specific factors:</p> <ul style="list-style-type: none"> • RE-write utility-specific factors: <i>The utility or supplier-specific emission factor must reflect delivered electricity based on certificates and other contracts for electricity either owned or retired by the utility/supplier on behalf of its customers or retired and claimed for public benefit, such as with US state RPS programs. As part of the calculation, the reporter should disclose whether and how electricity tracking certificates are used in the emission factor calculation, unless there is third-party certification of the utility product. Electricity from renewable facilities for which the attributes have been sold off (via contracts or certificates) or are otherwise not owned by the utility or supplier must be characterized as having the GHG attributes of the residual mix in the utility or supplier-specific emissions factor.</i> • Need to identify the boundaries of the rate- what’s included and not? Criteria should emphasize that it reflects the product as closely as possible. All utilities should reflect certificate sales in order to calculate adjusted factor (should be repeated in other factor) 	<p>Will include revised language</p>
<p>5. Address null power: Suggest this or similar language to prevent double counting: <i>The underlying electricity (or megawatt-hour) minus the instrument, sometimes called “null power,” must also not carry the GHG emission rate for the purpose of delivery and/or use claims.</i></p>	<p>Will reflect this more explicit reference to null power and preventing double counting</p>
<p>6. Defining “same electricity market” region:</p> <ul style="list-style-type: none"> • Overall approach: <ul style="list-style-type: none"> ○ Should be asking: what the boundaries for this approach to work? ○ Need to define characteristics of the market-boundary and define what is required. Any elements that don’t go into the definition can be used as guidance to <i>say if x is in place then it is the same mtk or it is not</i> • Role of physical interconnection: <ul style="list-style-type: none"> ○ Is physical interconnection implied or desired here? It should be. ○ Iceland has no interconnection, is it not included? ○ Shouldn’t be a globally liquid market for certificates. Do we have a single electricity market? No. Should be “Reasonable for an RE usage claim.” ○ Need to define the physical grid first before defining a market: look to grid definition in CDM. • Defer to issuing bodies: <ul style="list-style-type: none"> ○ Instrument should be used in the way designed by the issuing bodies. Clearest, simplest guidance for companies to follow. ○ What if issuing bodies don’t specify? Or are inconsistent? • Common elements of “markets”: <ul style="list-style-type: none"> ○ Any two areas can join a market as long as their production information can be exchanged to calculate a residual mix and ensure no double counting. ○ Doesn’t need common tracking system or residual mix possibility – if that’s the case, US isn’t a market (clearly not the case) ○ Regulatory similarity is hard to define: even within US, figuring out how the laws and regulatory framework are “consistent” is complex 	<p>Will ask TWG on defining market region</p>

<ul style="list-style-type: none"> ○ Is this the European Economic Area, or the EU member states specifically? Does it matter? ● Wording: <ul style="list-style-type: none"> ○ Not clear to say "sourced from" the same market – could be interpreted that the instruments is purchased from a vendor within the same market but generation occurs anywhere. ○ Drop "electricity" and only use "market". It can be misleading to try and define the concept "electricity market", or the boundaries thereof; by the terms of independent concepts, i.e. "regulatory framework consistencies". In the practical reality of EU, electricity markets, tracking certificate markets, and governing regulatory frameworks are to a very large extent, independent of one another. ● Suggested Language: The contractual instrument must be sourced from a generating facility located within the same electricity market as the reporting facility to which it is applied. The 'same electricity market' is defined by a consistent (but not necessarily identical) legal and regulatory framework governing the geographic regions of electricity production and consumption. For example, the EU and the US, despite individual countries or states having individual laws, operate under the same overarching union or federal laws and regulations, and therefore qualify as the same electricity market for use of contractual instruments. Some programs (but not this accounting guidance) may restrict the use boundary further, e.g. to an interconnected electricity region." 	
<p>7. Vintage:</p> <ul style="list-style-type: none"> ● Practices with GO: GO has a life span of 12 months from month of issuance (produced in Dec 2013 can be cancelled in a national registry up until Dec 2014). Should also add flexibility by saying GO needs to be retired matching electricity consumed within 12 months from production of electricity (not the issuance of the GO) ● Suggested language to align with Green-e (alignment does not reduce the rigor of the criterion and will avoid negative effects on US voluntary market operation): <i>The contractual instrument must be applied within reasonable proximity to the inventory year in which it was generated. For example, in the US Green-e Energy requires that energy and instruments were generated in the calendar year in which the instrument is applied, the first three months of the following calendar year, or the last six months of the prior calendar year.</i> 	<p>Will ask TWG feedback on Vintage wording</p>
<p>8. Residual Mix:</p> <ul style="list-style-type: none"> ● Calculating and applying a residual mix will be hard between areas regions that barely exchange energy ● Who creates footnote on presence/absence of residual mix? <ul style="list-style-type: none"> ○ We still strongly recommend that a footnote be required for the <u>location-based</u> reporting by entities in a market region without a residual mix, and not of the market-based instrument purchaser ○ An example of the footnote would also be helpful ● Should be required to be present: <ul style="list-style-type: none"> ○ Australia may resist calculating the residual grid mix emission factor unless this is a mandatory requirement. ● Should not be required to be present: <ul style="list-style-type: none"> ○ This is the only location where the data source (Table 1 info) has been required. What is the justification? ● What is included in a residual mix: <ul style="list-style-type: none"> ○ What about RECs for RPS? TCR's EPS does not allow these to be applied to a green power product, but they still do represent zero emissions so are 	<p>Will ask TWG feedback on Residual mix wording</p>

included in the default retail mix. CRS allows for certified green power programs to use compliance RECs up to the percent of the RPS	
<p>9. Other recommended Criteria:</p> <ul style="list-style-type: none"> Under a contractual approach, the instrument features should include that the attributes of lower emissions and renewable energy use "should be regarded as being transferred to the consumer for the purposes of the contract" including in relation to "a reduction in any carbon or GHG price pass through costs." This may avoid the "cherry picking" in relation to consumers claiming reduced scope 2 emissions but still being forced to pay for GHG pass through costs. Use balancing emissions for calculating supplier-specific emission factors Criteria should emphasize a distinction between instruments or products able to provide a power guarantee at any time, and those unable to (speaks to back-up issue) 	<p>Policy examples will be provided, but recommendations on policy treatment of taxes and other costs will not be given</p> <p>Balancing emissions will not be a required method for calculating market-based scope 2 emissions, but larger issue of backup and balancing will be discussed</p>

“Jurisdictionally-defined method”

The majority of TWG questioned or rejected the jurisdictionally-defined method provision in the Proposal. Presence of only one, imprecise example (Ademe), along with general confusion about how and why a jurisdiction would support an alternative method, makes this approach untenable. Allowing for a “third” approach for scope 2 also erodes the inventory comparability by method.

Instead, Guidance will recommend that in jurisdictions where an authority has specified an alternative approach to either market-based or location-based, companies can report a scope 2 calculation based on this figure *separately* from the two scope 2 figures.

Tracking emissions over time and beyond the scope 2 inventory	
Comment	GHGP Response
1. It is important that the guidance address or discuss the ability or inability for reporting entities to switch methods (side-by-side v standalone) at a later date.	Will clarify that reporting format can be changed at later date, but must disclose change in inventory
2. If sending scope 2 information to other entities, must have consistent figure it uses to ensure reporting inside the company is consistent! (recommend market-based)	Will clarify that consistency in information given to other entities should be consistent, and clearly labeled by method.
3. Implications for buying for products/supply chain/on behalf of others?	Will ask TWG best practice on supply chain energy attribute purchasing

Other disclosure	
Comment	GHGP Response
<ul style="list-style-type: none"> We are unclear why it matters that they disclose that they made non-qualifying purchases, and why they would make non-qualifying purchases in the first place (except for other non-GHG goals, which are irrelevant to GHG accounting). 	Will provide greater context for why non-qualifying data sources (such as supplier-specific emission factors that are unreliable) could be useful to separately report for context.
<ul style="list-style-type: none"> Make recommendation that two targets should be set 	Will describe value of two targets and identify how two targets could be set; but will not make formal recommendation to set two targets.

Assessing Data Quality	
Comment	GHGP Response
1. Make this an appendix	Will make it an appendix
<p>2. Decision-making value:</p> <ul style="list-style-type: none"> Link this data quality assessment to decision-making value and/or who an example of how quality criteria can be meaningfully used in decision-making. Perhaps if a company has facilities in a country without much tracking infrastructure, or with weak electricity system statistical reporting, the assessment would be useful. Otherwise, it feels like this guidance is unlikely to be referred to. It is also unclear if this data quality assessment is intended for both market-based and location-based accounting methods. 	Will provide examples of decision-making value and value in field for discussing emission factor "accuracy" and "reliability"
3. Relationships: Map these indicators against Quality Criteria for contractual instruments, and to the data hierarchy, e.g., if data quality is a sub-set of the method hierarchy, does higher data quality trump a less accurate method?	Will more explicitly link how Quality Criteria are built around indicators (cross over) and how data quality indicators broadly inform the data hierarchy but emission factors in hierarchy still can vary in quality based on indicators. Companies should use the best data for the preferred category, but consistent with other GHGP publications, Guidance will not require specific emission factors to be used.
4. Stress the difference between Quality Criteria as applied to market instruments and data quality as used here, to try to minimize potential confusion between the two. Here, they are only applied to location-based – why? If that’s the intention, should be more obvious.	See comment above: will provide clarifying language
<p>5. High Quality category:</p> <ul style="list-style-type: none"> Add that 'high quality' category would include verified data based on quality control checks published by government or academic institutions, using consistent methods, maximum feasible disclosure of source data and explanations/estimates of error sources, i.e., missing or inaccurate data." Add that spatial boundaries are specific to the dispatch region <i>adjusted for imports and exports</i>, to reflect the emissions from generation sources supporting local energy consumption. Link this to Data Hierarchy and specify examples: NERC region? Area controlled by a specific ISO? 	Will add wording to indicator list
6. Activity data: we intend to actually encourage data quality assessments of activity data?	Clarify that data quality assessments primarily for emission factors

Instrument Feature Disclosure	
Comment	GHGP Response
<p>1. Terminology:</p> <ul style="list-style-type: none"> Doesn't duplicate other terminology in accounting/market, which is good "Instrument feature" not clear term, as it's less about the features 	Will ask TWG on rephrasing as "product generation features and market

<p>of the instrument and more about the characteristics of the electricity or the market where the instrument is being used.</p> <ul style="list-style-type: none"> • “Instrument feature” is inappropriate because (1) the text describes what it calls electricity generation features (yet not all of the features relate to electricity generation), (2) none of them listed are features of the instruments themselves, and (3) “instrument feature” could be easily confused with Quality Criteria that apply to instruments. Technology type, project location, facility vintage, and (arguably) project funding are all product features. The presence of cap and trade, and whether the project is also producing offsets, are not so much product features as they are simply additional relevant information. • Recommended rephrasing: <ul style="list-style-type: none"> • “Product Features”: Earlier in the TWG process, the features of interest were described as product features, and we think that is still the best descriptor. • “Generation Facility Features” 	<p>context”</p>
<p>2. Format: Break out the information features by data type – i.e., what info should be disclosed for a residual mix? For instance, are all utilities in California impacted by cap and trade, and how does that affect the emission rate?</p>	<p>Will provide examples of feature disclosure for each product/data type</p>
<p>3. Context: Should make note that this disclosure doesn’t affect validity of scope 2 claims, to prevent company’s or report viewers from jumping to conclusions</p>	<p>Will provide appropriate caveats on interpreting instrument features</p>
<p>4. Definitions:</p> <ul style="list-style-type: none"> • Define regulatory surplus – specific examples in UK or elsewhere • Define the “offset” scenario here – not clear how this is an area of disclosure and not Quality Criteria? 	<p>Will provide more detailed explanation of regulatory surplus and offset scenarios (see Examples box)</p>
<p>5. Whether and Which Features to Require Disclosure:</p> <ul style="list-style-type: none"> • Keep recommended or option, as relevance of these disclosure items varies by market • All should be required. All but offset and cap-and-trade are available on the investment report that is an additional document to the energy certificate. • Require reporting of whether achieved RPS/regulatory surplus, so it is clear whether voluntary action is being taken vs. claiming the cleaner utility mix that’s received by default. • Should add feature disclosure around whether the claimed energy has an ecolabel or other type of certification • How does this apply to combined energy offers that represent a mix of projects? 	<p>Will not require disclosure on all features at this time</p> <p>Will ask TWG whether required disclosure on regulatory surplus for certificates/contracts is needed</p> <p>Will add certification criteria</p> <p>Will clarify how certain feature disclosure apply more clearly to certificates/contracts than to supplier mixes</p>
<p>6. Disclosure format:</p> <ul style="list-style-type: none"> • Have to determine how it will be used, who will be reading, and why? A table with the features and requiring MWh of purchased instruments that met them could be a structured disclosure with more info • <i>Role of both checklist and narrative:</i> Guidance on how to report this and other facility-level info aggregated to the corporate-level would be helpful; checklists only useful when the data the check relates to 	<p>Will provide examples and case studies of both checklists and narrative boilerplate language</p>

<p>is not aggregated. So, checklist good for info at corporate-level, but for facility or source characteristics, both narrative and certification.</p> <ul style="list-style-type: none"> • Checklist! • Template or boilerplate narrative to aid reader comprehension so they do not have to decode what an organization has said or interpret disclosure • Assuming that the answers may pertain to only a portion of a company's inventory or reported emissions, each answer should also disclose the quantity of emissions affected. • <i>Examples and definitions:</i> <ul style="list-style-type: none"> ○ Define what reporters should specifically disclose ○ Need examples of what types of responses are appropriate (ie., is gen location as "US" enough? 	
---	--

TWG recommended + GHGP accepted wording revisions on instrument feature disclosure

<ul style="list-style-type: none"> • Project location —Where is the electricity generation facility(ies) where the instrument was generated located (state, nation)?
<ul style="list-style-type: none"> • Facility age—In what year was the generation facility that created in the certificate/contract first operational or substantially repowered?
<ul style="list-style-type: none"> • Regulatory surplus— Were the MWh's reflected in this instrument used to meet a supplier regulatory requirement?
<ul style="list-style-type: none"> • Cap and Trade—Is the facility that produced the instruments you claim affected by a cap and trade policy? (Y/N) <ul style="list-style-type: none"> • If yes, Does the cap and trade program allocate allowances for retirement on behalf of voluntary purchases from this facility? (Y/N) • If yes, Were allowances retired on behalf of your voluntary purchase of instruments from this facility? (Y/N)
<ul style="list-style-type: none"> • Offsets—Is the facility producing other instruments such as offset credits from the same MWh? (Examples provided in Guidance)
<ul style="list-style-type: none"> • Funding – did the facility receive public subsidy? (If that subsidy resulted in the subsidy provider retaining the certificates and GHG emissions rate claims, then claims must follow certificates and power becomes "null power").

Outline of final Guidance

Comment	Response
1. The shorter the document the more helpful it will be!	Will aim for as much brevity as feasible given complexity of the topic
2. Disclosure: footnote may be impractical given different formats of the inventory itself. Address all disclosure requirements in a later section.	Disclosure requirements will be separately listed in Chapter on Reporting Requirements
3. Goal setting – provide greater guidance on how to formulate both GHG goals and related renewable energy procurement goals. For instance, can RE goals include the portion provided by the grid, or provided by an RPS? (in theory, a claim that's for the 'public good')	Will provide goal-setting guidance in Goal Setting chapter, including principles applying to related environmental goals/claims
4. Formatting: Put data quality evaluation in appendix rather than a chapter	Will make data quality evaluation separate appendix

<p>5. Verification – areas for emphasis</p> <ul style="list-style-type: none"> i. How to verify or ensure quality in supplier-specific emission factors provided ii. Reporting whether the claims/purchases are certified, and by which program. Whether auditors (CPAs or CIAs) were used or the evaluation against WRI’s criteria was done by reporting entity staff iii. Distinguish whether public (state organized) systems and private systems? iv. Clear audit trail demonstrating that the Quality Criteria have been met. Should describe what 3rd party certification of RECs or utility-specific emission factors include, what they mean for the data and how they contribute to the verifiability of the overall inventory v. Suppliers could certify or have their labels verified or assured through their regional tracking mechanism 	<p>Will provide these examples in Verification chapter outline, and seek further TWG feedback once Guidance more fully drafted</p>
--	--

Utility emission factor disclosure and/or Residual Mix calculation guidance as appendix

Majority said this would be useful generally to utilities, and there is value in covering as much as possible within one document that readers will need. However, majority also expressed that this is ultimately **not** appropriate in the Guidance given redundancies with other industry documents, regulatory practices, and its appeal to a different audience (utilities vs. end-users).

Appendix on residual mix recalculations will be considered, including following recommendations:

- Calculation of residual mix by subtracting all voluntary sales of differentiated power. Steps in this procedure helpful to clarify
- Discuss situations where the utility may have sold the RECs but used the energy, creating null power, and that residual mix should be assigned to the null power if this is not done by a tracking system already.
- Discuss statistical claims of attributes for consumer disclosure purposes and how this should be based on retirement of certificates.

System Design discussion as appendix

Majority agreed that this should be a separate document, emphasizing that:

- Program design guidance could help international development of market-based claims, but difficult to recommend criteria relating to the effectiveness of market choices or how to design specific markets.
- Many options and variations in legal and institutional contexts that complicate making value judgments on program effectiveness
- Guidance needs to have some ways like this to reflect variety of concerns and address questions about design

Therefore, introduction will acknowledge what is *not* included in Guidance, but what future work could include.

Requested examples and case study topics

1. Overall calculations and worked-out examples

2. On-site, owned solar projects where some energy consumed on-site, some energy sold to utility. Should answer following questions:

- Does a “net” figure from the utility suffice as activity data, or does that become problematic when REC sales occur?
- How to calculate these emissions according to both market-based method and location-based method?
- Is this a scenario that either does not qualify for scope 2 accounting (if consumed energy is from

owned/operated source, making its generation part of scope 1 emissions) but if RECs are sold, the energy consumption should be recorded in scope 2 with some other emission factor applied to it?
3. Virtual net metering – do the same principles as “owned on-site” accounting apply? Similar to example before, how should total consumption of electricity be determined (particularly if utility only tells you your net consumption, which reflects your production to the grid)
4. Corporate level REC purchases-- need to know how to assign those RECs to individual facilities using a zero-emissions factor. How does a company decide how to apply REC purchases to individual facilities? Emphasize that purchasing strategy up to them (i.e., they are free to choose best way to allocate)
5. Multiple pieces of contractual information —Need explanation that RECs/GOs are the “overriding” information source, particularly when there is overlapping information (i.e., supplier-data is also available for all facilities, and/or contracts in place)
6. How accounting affected when offsets are created from RE projects, following these scenarios: <ul style="list-style-type: none"> • Offsets are included in a purchased electricity product (ex: provided by supplier to “reduce” emissions globally) • Reporter owns an RE project that produces offset credits sold on the global market, and the company consumes the electricity • Reporter has energy purchase contact with a renewable energy project that produces offset credits sold on the global market
7. FIT’s and GO’s —What happens in the case of Germany where in theory you could have a PPA for renewable energy but the project got the FIT so no GO is issued. Is the PPA an accepted contract in this instance or are German projects essentially out unless they don’t take the FIT?
8. Avoided emissions vs. emission rate —Emphasize difference between previous treatment in the US as avoided emissions (using non-base load factors with a line-item adjustment showing gross and net scope 2 emissions) and current approach (“attributorial” approach). Should give examples of language shift away from RECs-as-offsets to RECs as one of several possible energy tracking instruments that conveys claims about GHG emissions.

Terminology	
Comment	GHGP Response
1. Shorter name for “location-only as supplemental” – “primary/secondary” or “primary/supplemental”	Will change name to “primary/supplemental” reporting
2. Throughout: Choose “market-based” or “market-inclusive.” Using both is too confusing without defining each, and there’s no need for both. We suggest “market-based.” Also, choose “location-based” or “location-only” and be consistent throughout.	Will change to “market-based” approach to calculating scope 2, that uses different calculation <i>method</i> and <i>emissions factors</i>
3. Proposed interpretation of terminology: <ul style="list-style-type: none"> • <i>Market-inclusive and location-only figures</i> = scope 2 totals • Market-based <i>approach</i> and location-based <i>approach</i> (lines up nicely with concept of consolidation approaches in the CS) • Market-based method and location-based method = RECs vs. grid mix, each one represents a different calculation method 	
4. Remove references to “utility” – should always be supplier, as you could have a separate local utility delivering electricity vs. the supplier (over which the company has control)	Will use “electricity supplier” consistently throughout document, and provide description of difference between roles in electricity supply chain

<p>5. Data should refer to activity data – clarify that the rest is about emission factors (e.g., emission factor quality)</p>	<p>Will use terms activity data and emission factors precisely, rather than “data”</p>
<p>6. Define “facility”. If it means a physical facility, perhaps better as “electricity consumption” or “facilities, operations, or activities.”</p> <p>7. Standardize terminology between plant and facility.</p>	<p>Will use term “electricity consumption in facilities, operations or other activities.”</p> <p>For electricity generating units, will use term “electricity generating facilities”</p>
<p>8. <i>From Box 1:</i> First, we would not refer to these markets as “systems” because that introduces a new bit of jargon that will make readers wonder if it means something other than a market.</p>	<p>Will eliminate redundant use of “systems” (see Box 1 corrections for further detail)</p>
<p>9. Broaden the language to “energy” throughout instead of just electricity, since it should apply to thermal energy as well</p>	<p>Will use “energy” in applicable locations, but emphasize focus here on electricity examples</p>
<p>10. Difference between electricity purchase vs. electricity consumption?</p>	<p>Will provide precise scope 2 definition and distinction between total energy consumption and amount acquired from external generation</p>