



GoldPower® and the new GHG Protocol Scope 2 Guidance: A guide to reporting

In February 2015 the World Resources Institute released detailed new guidance on reporting Scope 2 emissions under the Greenhouse Gas Protocol Corporate Standard¹. A particular feature of the new guidance is that it provides greater recognition for purchases of Renewable Energy Certificates (RECs), and detailed guidance as to how and when companies can include REC purchases in GHG Protocol-compliant reporting.

GoldPower is a premium Renewable Energy Certificate that enables organisations to help transform the way the world generates electricity, to report their actions under global reporting initiatives such as the GHG Protocol, and to achieve recognition from their stakeholders.

In particular, GoldPower:

- **supports and tracks** MWh of renewable energy generation from clean electricity projects in developing countries.
- **encapsulates** all the environmental benefits the project has created, including the renewable energy benefit, the zero emission rate, and the sustainable development co-benefits such as infrastructure improvements, technology transfer, employment and training, and clean air.
- **has impact**. GoldPower stimulates the expansion of renewable electricity globally, as opposed to simply redistributing certificates from existing projects.
- **is recognised and supported** by WWF the world's leading conservation organisation. WWF was actively involved in the development of GoldPower.
- **is underpinned** by the high quality criteria of the Gold Standard², particularly in terms of 'additionality', 3rd party verification and sustainable development benefits

Under the new GHG Protocol Scope 2 Guidance, GoldPower can be reported as zero-emission renewable energy, thereby reducing the reporting company's Scope 2 emissions. This document provides details of how and in what circumstances to do this, in order to remain fully compliant with the new guidance.

Market vs Location Based Reporting

The major change under the new Scope 2 Guidance is the creation of two parallel methods for reporting emissions: location-based reporting, using emission factors for the location(s) where the electricity is consumed (and assumed to also be produced), and market-based reporting, which allows companies to report their purchases of renewable energy by way of "contractual instruments" i.e. RECs, Power Purchase Agreements or supplier-specific green power contracts.

Companies that use contractual instruments are required to report their emissions using both methods, but can specify that they use the market-based method for the purpose of setting and reporting against targets. This allows them to count their use of contractual instruments towards those targets.

Quality Criteria for Contractual Instruments

In order to maintain standards and assist companies with their purchasing decisions and reporting, the new Guidance provides detailed Quality Criteria³ for contractual instruments used under the market-based reporting method. The table below provides an overview of how GoldPower meets the applicable Quality Criteria⁴.

¹ [GHG Protocol Scope 2 Guidance: An amendment to the GHG Protocol Corporate Standard](#)

² www.goldstandard.org

³ Scope 2 Guidance, p60, Table 7.1; detailed additional guidance p63-65, Section 7.5

⁴ Criteria 6 & 7 are not included here as they are not applicable to GoldPower



Quality Criteria	How GoldPower meets the Quality Criteria	Compliant?
<p>1. Emission Rate Claims: Contractual Instruments (CIs) must convey the direct GHG emission rate attribute associated with the unit of electricity produced.</p>	<p>GoldPower is a renewable energy instrument that includes the Emission Rate attribute of each MWh produced, and conveys the zero Emission Rate to the purchaser.</p> <ul style="list-style-type: none"> ▪ The Emission Rate of Zero is determined at the time of initial project certification (Validation and Verification under the Gold Standard), and is carried through an unbroken chain of custody, underpinned by legal contracts, to the point of retirement on behalf of the customer. ▪ The customer receives a GoldPower certificate that specifies the Emission Rate as zero. 	✓
<p>2. Unique Claims: CIs must be the only instruments that carry the GHG emission rate attribute claim associated with that quantity of electricity generation (unique claims)</p>	<p>No other instruments carrying the GHG emission rate claim can be issued from the project for the same period of electricity generation.</p> <ul style="list-style-type: none"> ▪ Under the latest rules of the Gold Standard⁵, for new issuances of GS VERs or CERs 3rd party verifiers are obliged to confirm that no other instruments relating to the electricity generated in that period have been created. ▪ In addition, the GoldPower Product Standard⁶ requires an attestation from the Project Owner warranting that it has not sold or otherwise represented the electricity corresponding to the GS CERs or GS VERs as renewable, has not issued any other renewable energy or emission reduction instruments for that electricity, and that the electricity is not counted towards any voluntary or compliance scheme, RPO or similar. <p>Note that technically, GS VERs or CERs exist relating to the same MWh as the GoldPower RECs, however, the retirement of the GS VER/CERs is an integral part of the GoldPower REC retirement process. GoldPower RECs are thus “fully integrated” certificates that meet this criterion.⁷</p>	
<p>3. Retirement: CIs must be tracked and redeemed, retired, or cancelled by or on behalf of the reporting entity.</p>	<p>Details of all GoldPower purchases are tracked and reported on the GoldPower Register.</p> <p>All GoldPower RECs are retired on behalf of the buyer, and retirement details are provided on the GoldPower Register, which also provides evidence of retirement of the associated Gold Standard units on the Gold Standard Registry.</p> <p>An independent annual audit of all GoldPower sales confirms the accuracy of the transaction reporting and retirement.⁸</p>	✓
<p>4. Vintage: CIs must be issued and redeemed as close as possible to the period of energy consumption</p>	<p>GoldPower has formal rules that require the vintage (i.e. the renewable electricity production period) to be no more than 2 years prior to the reporting period for which it has been purchased (i.e. the electricity consumption period)⁹. The vintage of GoldPower is disclosed to purchasers.</p> <p>Note that this is a longer time-frame than for typical REC schemes. However, this is necessary given the verification, issuance and reporting processes of the underlying Gold Standard credits, and does not affect compliance with this criterion.</p>	✓

⁵ http://www.goldstandard.org/wp-content/uploads/2011/09/Rule-update_Clarification-of-double-counting-RECs1.pdf

⁶ <http://goldpower.net/what-is-goldpower/the-goldpower-product-standard/>

⁷ Scope 2 Guidance, p63, Section 7.5: “In specific cases of multipliers or issuance of multiple instruments from the same MWh, then all instruments shall be retired for a full claim on that MWh”

⁸ See the latest [GoldPower Assurance Report](#)

⁹ This may be extended to a maximum of 3 years in exceptional circumstances



5. Market Boundaries: CIs must be sourced from the same market in which the reporting entity's electricity-consuming operations are located and to which the instrument is applied.

Climate Friendly, as the body responsible for GoldPower, has established the market boundaries in which certificates may be traded and redeemed, retired or cancelled, in the context of GHG Protocol.¹⁰

- GoldPower may be sourced from any project located in the same **country** as the facilities (i.e. electricity consumption) for which it has been purchased
- GoldPower may be sourced from a project located in the same **region** as the facilities for which it has been purchased, where the countries in the region have an interconnected grid (including by undersea cable) and where there is a market between the countries for renewable energy certificates and/or electricity. Regional market boundaries include:
 - Singapore, Malaysia & Thailand, which together form a connected regional electricity market along a common peninsular.
 - Additional regional boundaries are under evaluation. Please contact the GoldPower team directly to discuss regional solutions in other locations

Note that these market boundaries relate solely to GHG Protocol compliant reporting of Scope 2 emissions, and in no way restrict the use of GoldPower for global electricity consumption where reporting reduced or zero Scope 2 emissions under the GHG Protocol is not a critical requirement.



8. Residual Mix: An adjusted residual mix characterizing the GHG intensity of unclaimed or publicly shared electricity shall be made available for consumer scope 2 calculations, or its absence shall be disclosed by the reporting entity

GoldPower projects are typically in countries which do not have a system for calculating and reporting a residual mix.

Reporting companies should disclose the absence/non-adjustment of the residual mix. They may also provide an assessment of the materiality of this.

The GoldPower technical team will provide assistance with this on request, and will seek to work with Governments and other agencies in priority locations to improve residual mix calculation and reporting



Disclosure

The Scope 2 Guidance states that “companies should disclose key features of contractual instruments, such as certification labels, characteristics of the energy generation facilities, and policy context”¹¹, and includes a ‘Disclosure Checklist’¹² as a suggested format for providing these details. To assist companies in their reporting, we provide a summary of GoldPower features below. The table follows the Disclosure Checklist, but separates the list into product-specific and project-specific disclosure.

Note that the questions in the checklist simply reflect best practice in terms of disclosure and/or likely stakeholder interest. The responses to these questions do not affect compliance with the Quality Criteria for Contractual Instruments, or with the Scope 2 Guidance overall.

¹⁰ Scope 2 Guidance, p65, Market Boundaries: “Companies should check whether the regulatory authorities and/or certification/issuing bodies responsible for certificates have established the boundaries in which certificates may be traded and redeemed, retired or cancelled, and should follow these market boundaries.”

¹¹ Scope 2 Guidance, p12, Table 1.1

¹² Scope 2 Guidance, p68, Table 8.1



Product-specific Disclosure

Certification or label name	GoldPower Renewable Energy Certificates
What is being certified?	All environmental attributes associated with the MWh of generation, including: <ul style="list-style-type: none"> ▪ Ownership of rights to renewable energy attributes ▪ GHG Emission Rate attribute (each MWh has an emission rate of zero). ▪ Additionality ▪ Absence of negative social and environmental impacts resulting from the construction and/or operation of the renewable energy facility
Incremental funding programs – Does the label or certification program contribute incremental funding to new projects, and if so how much?	The additionality criteria of the underlying Gold Standard certification process ensures that purchases of GoldPower create market incentives for the development of new projects.
Offsets – Is the facility producing offset credits from the same MWh reflected in the contractual instrument?	Yes, all GoldPower projects issue Gold Standard carbon credits. However, these are retired as an integral part of the GoldPower retirement process and cannot be sold or used separately, as required in order to meet the Quality Criteria for Contractual Instruments (No. 2 - unique claims)

Product-specific Disclosure – Details should be provided for each facility for which GoldPower is purchased – see worked example below

Energy resource type – What energy resource was used to generate the claimed energy?	<i>Technology type e.g. wind, solar, small scale hydro, renewable biomass, etc. Project technology details are provided for all GoldPower purchases</i>
Facility location – Where were the electricity generation facility(ies) where the instrument was generated located (state, nation, grid region for emission calculations)?	<i>Project location details are provided for all GoldPower purchases</i>
Facility age – In what year was the generation facility that created the certificate/contract first operational or substantially repowered?	<i>Facility age details can be provided for all GoldPower purchases. Note that most GoldPower projects have been built within the last seven years. Newer facilities will be selected where possible if this is a priority for the buyer</i>
Supplier quotas	<i>GoldPower projects rarely contribute to supplier quotas, but details can be provided where this is the case</i>
Cap and Trade – Is the facility that produced the instruments you claim affected by a cap and trade policy (Y/N)	<i>No GoldPower projects are currently subject to cap and trade policies. Details will be provided to buyers if this arises in the future</i>
If yes, Does the cap and trade program allocate allowances for retirement on behalf of voluntary renewable electricity purchases from this facility? (Y/N)	NA
If yes, Were allowances retired in relation to on behalf of your voluntary purchase of instruments from this facility? (Y/N)	NA



Funding – Did the facility receive public subsidy? (If that subsidy resulted in the subsidy provider acquiring the certificates and GHG emissions rate claims, then claims must follow certificates, and the energy becomes “null power”).

GoldPower projects generally receive minimal or no subsidy. In some cases the projects may benefit from feed in tariffs, but with no associated transfer of certificates or emission rate claims. Where this is the case details can be provided

Other policy instruments

NA

Below we provide a worked example of how to report your GoldPower purchases, incorporating both the emission calculation¹³ and the appropriate project-specific disclosure for each facility or location. A column is included to highlight the local social and/or environmental co-benefits resulting from the construction and operation of the GoldPower projects.

Activity Data					Emission Factors	Calculated Emissions	Additional Project-specific Disclosure						
Facility	Total Energy Consumption (MWh)	Quantity of Energy purchased via Ci (MWh)	Contractual Instrument type	Meets Scope 2 Quality Criteria?	CO ₂ e emission rate mt/MWh	CO ₂ e (mt)	Energy Resource Type	Facility Location	Facility Age	Supplier Quotas?	Cap and Trade?	Public Subsidy?	Project Co-Benefits
Singapore office and operations	20,000	20,000	GoldPower RECs	Yes GoldPower Market Boundary: Thailand, Malaysia and Singapore interconnected regional grid and electricity market	0	0	Solar PV	Provinces of Korat, Sakon Nakhon, Nakhon Phanom, Khon Kaen and Loe, Thailand	2 yrs (started operation 2013)	No	No	No subsidy for construction; facility receives Thai solar preferential feed-in tariff	Local employment and training; local industry development; contribution to development of community scale solar projects in remote rural areas
China production facilities	100,000	25,000	GoldPower RECs	Yes	0	0	Wind	Guazhou County, Gansu Province, China	8 yrs (started operation 2007)	No	No	None	Local employment and training; local industry development; contributions to local school
		75,000 (remaining energy without contractual instruments)	Grid Average (North West Power Grid)	n/a	0.8273	62,048	-	-	-	-	-	-	-

For maximum transparency, we also recommend that you provide full details of your GoldPower purchase(s) as displayed on the GoldPower Register, including a link to the record(s) on the Register itself.

¹³ Scope 2 Guidance, p51, Table 6.5 “example calculation”



Example: GoldPower Register records for SAP's purchase of 180,000 MWh of GoldPower to contribute to its target under the RE100 initiative.

ID	Purchase Year	Invoice Date	Invoice Number	GoldPower Beneficiary	GoldPower MWh	Official Project Name	Vintage	Project MWh Generated	Project Emission Factor	Tonnes of Abatement	Retirement Date	Serial No. and Retirement Link	Retirement Type	Accreditation Purpose
170	2014	30-Oct-2014	14_314_300190_1616_A	SAP	50,000	InfraVest Changbin & Taichung Bundled Wind Farms Project	2013	50000	0.772	38600	30-Oct-14	GS1-1-TW-GS472-12-2013-3497-5548 to 44147	Dedicated	-
171	2014	30-Oct-2014	14_314_300190_1616_A	SAP	130,000	Balikesir 142.5 MW Wind Power Plant Project	2013	130000	0.608	79092	30-Oct-14	GS1-1-TR-GS971-12-2013-2912-48836 to 127927	Dedicated	-

Links to access these records live on the GoldPower Register:

<http://goldpower.net/goldpowerregister/170/>

<http://goldpower.net/goldpowerregister/171/>

Summary

In order to acquire and report GoldPower in a way that is compliant with the new Scope 2 Guidance, simply follow these straightforward steps:

- Purchase GoldPower from appropriate countries or regions to suit your operations, taking into consideration our guidance on market boundaries.
- Incorporate the GoldPower purchase in your GHG Protocol compliant reporting, referring to the disclosure guidance above
- Seek assistance from your GoldPower supplier or from the GoldPower technical team if additional information is needed for reporting and disclosure purposes
- Be sure to specify the market-based method as the primary reporting method for corporate goal setting and reporting, so that your GoldPower can be counted towards your targets

More information on GoldPower can be found at www.goldpower.net

For additional questions or assistance regarding GoldPower reporting, please contact the GoldPower team on info@goldpower.net